

# The Mining Journal, RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1552.—Vol. XXXV.

LONDON, SATURDAY, MAY 20, 1865.

(STAMPED.....SIXPENCE.  
UNSTAMPED.....FIVEPENCE.

## MR. JAMES CROFTS, SHAREBROKER, No. 1, FINCH LANE, CORNHILL.

Holders of mining shares DIFFICULT OF SALE IN THE OPEN MARKET may find purchasers by negotiation, through Mr. Crofts' agency. Also parties requiring ADVICE how to act as to the DISPOSAL, or ABANDONMENT, of doubtful mining stocks may profitably avail of Mr. Crofts' long experience on the market in all cases of doubt or difficulty.

FOR SALE, SPECULATIVE SHARES:—10 Rosewarne Consols, 12s. 6d.; 50 North Basset, 16s. 6d.; 75 Great South Chiverton, 5s.; 25 Abraham Consols, 3s.; 100 Wheal Unity, 4s. 6d.

FOR SALE:—50 South Callington, 35s.

GREAT SOUTH CHIVERTON.—It is intimated to investors that the cheap shares in this mine, lately sold by auction, are nearly absorbed, and when so the price may advance 10 per cent.

SPECIAL BUSINESS IN Great North Laxey, Bottle Hill, Redmoor, Ladcott, Great Laxey, Frank Mills, Great Bury, Chiverton, West Chiverton, East Carn Brea, North Chiverton, South Darren. All in good demand.

## MR. JAMES LANE, No. 44, THREADNEEDLE STREET, LONDON, E.C.

JAMES LANE has FOR SALE at net prices:—5 Basset and Grylls; 50 Bedol-Aur; 30 Carn Camborne, 35s.; 50 Dale, 7s. 6d.; 50 Drake Walls, 15s.; 20 East Lovell, 21s. 6d.; 20 East Russell; 50 East Jane, 15s.; 10 East Caradon; 10 East Carn Brea; 21s. 6d.; 20 East Rosewarne, 21s. 6d.; 10 Frank Mills, 4s.; 50 Great Wheal Bury, 25s.; 20 Great North Laxey, 25s.; 30 Harriett, 15s. 6d.; 20 Hellenbeagle, 25s.; 30 Lady Bertha, 25s.; 20 Mandlin, 21s.; 20 North Trekerby, 25s.; 50 North Devon; 50 New Wheal Bertha; 20 North Laxey, 25s.; 50 North Jane, 7s. 6d.; 50 North Miners, 4s.; 40 Pollard, 1s.; 5 Rosewarne Consols; 10 Rosewarne United, 35s.; 20 South Laxey, 25s.; 30 South Condurow, 25s.; 25 Tolvadden, 27s. 6d.

MR. WILLIAM LELEAN (Member of the Mining Exchange), has FOR SALE the FOLLOWING SHARES, at net prices:—

40 Bedol-Aur, 12s. 6d.; 20 Great No. Downs, 25s.; 50 South Chiverton, 5s.; 20 Carn Camborne, 35s.; 10 Hellenbeagle, 25s. 6d.; 30 Lady Bertha, 25s.; 20 Mandlin, 21s.; 5 Marke Valley, 25s. 6d.; 15 No. Trekerby, 25s. 6d.; 30 North Basset, 16s. 6d.; 20 North Croft, 25s.; 15 North Buller, 25s.; 20 North Birch Tor, 35s.; 10 New Rosewarne, 25s.; 30 North Robert, 15s.; 10 No. Shepherds, 25s.; 50 North Laxey, 25s.; 40 North Miners, 4s.; 20 Pendennis, 25s.; 50 Prince of Wales, 2s. 6d.; 10 Providence, 25s.; 5 Rosewarne Utd., 35s. 6d.; 100 Redmoor, 7s. 6d.; 20 St. Day United, 16s. 3d.; 5 South Basset, 25s. 6d.; 10 So. Condurow, 25s.; 15 South Darren, 4s.; 60 South Greenville, 3s. 6d.; 5 South Laxey, 25s.; 1 South Caradon, 25s. 6d.

MR. LELEAN BUYS and SELLS all descriptions of ENGLISH and FOREIGN STOCKS and SHARES, INSPECTS MINES, and TRANSACTS all the usual BUSINESS of a STOCK and SHAREDEALER. Parties may rely upon him for sound advice and punctuality in all his engagements.

I refer my correspondents to my remarks in page 320 of this day's Journal.

MR. R. CLIFT, MINE SHAREDEALER,  
45, THREADNEEDLE STREET, LONDON, E.C.

MR. JAMES WALTON, STOCK, SHARE, AND MINING  
BROKER, 9, QUEEN'S SQUARE, BRISTOL.

JOSEPH J. REYNOLDS, JUN.,  
37, OLD BROAD STREET, LONDON, E.C.

MR. J. B. REYNOLDS, 3, CROWN COURT, OLD BROAD  
STREET, LONDON, E.C.

Not long since I directed special attention to mines selling at excessively low prices, and I am happy to say that there are persons who did buy shares which were at that time almost given away, and which have since had a considerable rise. For instance, North Dolcoath, then selling at 2s. or 3s. per share, have since been at 17s. 6d.; Harriett, then at 3s. or 4s., now 5s. 6d.; and "in demand." East Gwinnlake, then about 1s., have since been at 25s.; Lady Bertha, then at about 5s., have recently been at 21s. 6d. But "there are still as good fish in the sea as ever were caught," and bearing in mind that my friends' interests are my own, my prompt attention to duty may be relied on. I have business in the following, and am prepared with valuable information respecting them:—

East Wheal Lovell. East Caradon. North Dolcoath.  
Great North Laxey. South Condurow. El Chico.  
Great Vor. East Carn Brea. North Frances.  
Wheal Vor. North Trekerby. North Basset.  
Wheal Crebor. West Great Work. South Callington.

WANTED, an offer for 50 Great South Chiverton.

SOUTH CALLINGTON.—Mr. J. B. REYNOLDS directs special attention to this property. Present price, shares, 20s. to 30s. An immediate purchase recommended.—3, Crown-court, Old Broad-street, E.C., May 19, 1865.

MESSRS. BREWIS AND LYNCH, 3, CROWN COURT, OLD  
BROAD STREET, LONDON, E.C., and 73, CLAYTON STREET, NEW-  
CASTLE-ON-TYNE, SHAREBROKERS.

A little more than two years ago Mr. EDWARD BREWIS (Member of the Mining Exchange) recommended all his friends to buy West Chiverton shares at 15s to 20s, and he has since secured that the mine was worth double the money then selling for; in nine months the shares were marketable at 400 per cent. advance, and we again say to all key Chiverton for investment. The mine is at 400 yds. where West Chiverton is the management, which it possesses. West Chiverton is producing £60,000 per annum in lead ore, and increasing.—Bankers: National Bank, Old Broad-street, London.

JAMES HUME, 74, OLD BROAD STREET, LONDON, E.C.  
(Member of the Mining Exchange).

BUYER of North Basset, 16s.; Union, 7s. 6d.; Tolvadden, 25s.; North Shepherds, (state lowest price); Uny, 25s.; Great Bury, 25s.; South Condurow, 25s.; East Chiverton (state lowest price); Great South Chiverton, 5s.; East Russell, 21s. 6d.; New Lovell, 25s.; North Basset, 16s.; and other market shares at closest prices.

J. Hume's "Circular" for May now ready; 5s. per annum; 6d. per copy.  
Bankers: London Joint-Stock Bank.

MR. GEORGE BUDGE, No. 4, ROYAL EXCHANGE  
BUILDINGS, LONDON, E.C. (Established 18 years), has FOR SALE at net prices:—40 Wheal Unity, 4s.; 100 Welsh Gold, 12s.; 20 Great North Laxey; 10 East Carn Brea, 35s.; 10 Mandlin; 100 Great South Chiverton, 4s.; 1 Mine, £200; 75 Great Vor; 25 Quebrada (40s. paid); 60 Redmoor, 7s. 6d.; 100 Santa Barbara, 14s.; 100 East Devon, 5s.; 20 Hingston Down; 75 Don Pedro, 9s.; 200 New Treleigh; 5 Billias; 10 Chiverton; 25 North Jane; 40 North Robert, 13s. 6d.; 50 Wheal Harriett; 12s.; 20 North Shepherds; 25 Gwinnlake; 60 North Dolcoath, 9s.; 25 Carn Camborne, 35s.; 80 Camborne Vant; 125 Merilyn, 9s. 9d.; 20 Great Bury, 25s.; 1 Wheal Seton, 25s.; 40 Frodo and Bolivia; 30 United Mexican, 24s.; 10 East Russell.

## THE MERRYBENT AND MIDDLETON TYAS MINING AND SMELTING COMPANY (LIMITED), YORKSHIRE. (BETWEEN RICHMOND AND DARLINGTON.)

Out of the first issue of 7500 there remains only 2000 shares to be subscribed for. The deposit is £1 per share on application, and £2 per share on allotment. The last day of application is fixed for Monday, June 5th. Those who first apply for shares will have a preference.

MR. PETER WATSON begs to acquaint his friends and clients that he has known this valuable property from his childhood, and (having been on it several times) he is in a position to give important information respecting it.

MR. PETER WATSON also begs to request those who are desirous of having an interest in this company that they will lose no time in making immediate application, through him, for the number of shares required, although from the limited number (2000 shares) unsubscribed for, he cannot undertake that the whole number applied for will be allotted.

From the influential parties (in Yorkshire and Durham) connected with this company, and from the bona fides of the undertaking itself, the shares are likely soon to attain a high figure. The prospectus published gives full particulars.

PETER WATSON, Stock and Sharedealer, 79, Old Broad-street, London, E.C.

EAST WHEAL LOVELL.—MR. PETER WATSON attended the meeting of shareholders on the 7th April. The mine has been officially inspected (for the shareholders) by three of the most respectable, intelligent, and trustworthy tin mine captains in the county of Cornwall, as well as two others, who, being all unbiased in their judgment, have valued the north lode in the shaft for its length at £140 to £150 per fm. On this reliance can be placed. Good courses of tin will shortly be operated upon, both on this (north) lode and the south lode, which latter, in sinking the shaft, has been valued at £80 to £90 per fm. The Turnpike shaft will shortly be commenced (by a line of flat-roads) and operated on the lode, which has been valued at £20 to £25 per fm., and at a very easy cost for driving.

One of the recent inspectors, on whose judgment reliance can be placed, assured me a few days ago, whilst I was at Helston, "if ever East Wheal Lovell shares were worth £25 each they are now, and more." Another inspector, who is thoroughly acquainted with East Lovell, also assured me "that great profits can be made at a little cost." I, therefore, strongly recommend an immediate purchase of shares at present low prices.

79, Old Broad-street, London, E.C.

EAST WHEAL LOVELL MINE.—Ever since these shares were at £7 and £8 per share, I have weekly recommended a purchase. Considering the great returns of tin now being made, which will be shortly considerably increased from the important discoveries now being made, and monthly profits gradually increased. I again strongly recommend an immediate investment at the present prices of £14 and £16 each, believing as I do that they will not only see as high a figure as they were some months ago, but that they will soon be considerably beyond that figure.

Every information given personally or by letter.  
PETER WATSON,  
79, Old Broad-street, London, E.C.

GREAT NORTH LAXEY (LIMITED).—MR. PETER WATSON is in a position to give exclusive information as to the real position and prospects of this mine, and at the same time can negotiate business in the shares.

79, Old Broad-street, London, E.C.

MR. PETER WATSON is a BUYER or SELLER of SHARES at fair market prices in the FOLLOWING MINES:—

Great Wheal Vor. Wheal Grylls. Clifford Amalgamated.  
East Wheal Lovell. East Wheal Grylls. Wheal Margaret.  
Lady Bertha. Great Wheal Grylls. Wheal Caradon.  
Tincroft. Great Carn Brea. East Carn Brea.  
Hingston Consols. East Caradon. Wheal Arthur.  
Great North Laxey. Great Laxey.  
Shareholders desirous of selling in any of the above, will please state the lowest net cash price.—79, Old Broad-street, London, E.C.

STOCK AND SHAREDEALER.—MR. PETER WATSON, ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, 79, OLD BROAD-STREET, LONDON, E.C.

Twenty years' experience.  
Bankers: The Union Bank of London, and the Alliance Bank.  
Every information can be obtained on personal application, or by letter, as to purchases and sales of Mine, Railway, Bank, and other Shares and Stocks, and the best investment for capital.

From the close proximity of his offices to the Stock Exchange, as well as the Mining Exchange, PETER WATSON is enabled to act with promptitude on all orders entrusted to him, which at all times are carried out with punctuality.

PETER WATSON'S WEEKLY MINING CIRCULAR AND SHARE LIST, published every Friday, price 6d. each copy, forwarded on application. This Circular contains weekly important information with respect to all the principal Dividend and Progressive Mines in Devon and Cornwall. Annual subscription, £1 1s.; single copy, 6d.

79, Old Broad-street, London, E.C.

MR. HERRON, MINING SHAREDEALER,  
2, ADAM'S COURT, OLD BROAD STREET, LONDON, E.C.

MR. EDWARD COOKE, MINING SHAREDEALER,  
2, CROWN CHAMBERS, THREADNEEDLE STREET, AND MINING EXCHANGE, LONDON, E.C.

The following mines dealt in at fair market prices net:—South Darren, East Lovell, North Chiverton, Great North Laxey, Clifford, Frank Mills, Great Laxey, Great Wheal Bury, and Chiverton Moor. These shares are all deserving of special attention, as from their present price there is not much chance of any decline, but the tendency is decidedly upwards.

May 19, 1865. Bankers: Alliance Bank, Lothbury.

MR. C. POWELL, MINE SHAREDEALER,  
78, OLD BROAD STREET, LONDON, E.C.  
(Member of the Mining Exchange).

MR. POWELL begs to inform his friends and the public that he TRANSACTS BUSINESS, as BUYER or SELLER of SHARES in MINES, at close net prices, either for cash or the fortnightly settlement.

MR. POWELL continues to recommend the Frontino and Bolivia (South American) Gold Mining Company's shares for investment. The immense gold-yielding resources of these mines are being rapidly developed under the superintendence of Capt. W. Goyen (late of the St. John del Rey Company's Mines), whose abilities as a practical gold miner are indisputable. The directors (who hold about one-quarter of the shares) are gentlemen of high standing, and the shares generally are well held.

MR. POWELL is a BUYER or SELLER of these shares, and is prepared to make a close price to parties having business in them, either for cash or the fortnightly settlement.

## MR. T. P. THOMAS'S NEXT SALE OF SHARES, BY PUBLIC AUCTION, will TAKE PLACE, on THURSDAY, June 8, 1865, at Gar- raway's, Change-alley, Cornhill, at Two o'clock precisely, when amongst others he will offer the following:—

100 Gt. So. Chiverton Lead. 100 North Miners prefer-  
200 Llanberis Slate Com- 14 Roskarnoweth Copper. 50 Wheal Harriett.  
pany (Limited). 3 Grambler & St. Aubyn 25 East Greenville.  
50 Cefn Clicen Lead. 30 North Jane. 10 North Shepherds Lead.  
35 Havan Silver-Lead. 15 North Grambler, 10s. 10 North Croft.  
200 Norwegian Copper. 50 North Miners Lead (£1 60 Lady Bertha.  
100 Cape Cornwall. paid). 1 Wheal Seton.

MR. THOMAS requests that parties desirous of putting up shares at this sale will let him have their instructions not later than Thursday, June 1, in order that they may be advertised.—6, New Broad-street, London, E.C.

## MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER, 6, NEW BROAD STREET, LONDON, E.C.

MR. FRANCIS G. LANE, No. 2, ROYAL EXCHANGE,  
LONDON, E.C., has the following SHARES FOR SALE, free of commission:—

100 Bedol-Aur, 15s. 1 New Seton, £12 50 Quebrada (£7 10s. pd.),  
10 Billins (offer wanted). 70 New W. Marthas, 22s. 25s.  
50 Cefn Clicen, 10s. 3d. 5 North Buller. 50 Santa Barbara, 15s.  
35 Carn Camborne, 31s. 3d. 30 North Jane. 25 St. Just United, 25s.  
50 East Jane, 15s. 15 North Grambler, 10s. 75 South Canadian Wheal  
10 Gt. Wh. Vor, £32 50 North Roakey, £18 4. Hooper, 10s.  
25 Gt. Dev. & Bedford, 32s. 50 North Miners, 5s. 3d. 75 Vale of Towry, 2s. 6d.  
25 Marke Valley, £3 3s. 20 Pennant Slate, 25s. pm. 25 West Wh. Vor, 30s. 6d.  
25 N. Wh. Lovell, 32s. 9d. 20 Prosper United, £3 1 3 50 Wheal Crebor, 35s. 9d.

SOUTH LOVELL, in 2000 shares.—I again advise the immediate purchase of these shares. The operations of the "bears" have so far succeeded as to cause a decline in the price in this they have been favoured by a temporary falling off in the value of the lode in the engine-shaft. I would recommend parties to hold on their shares, and those who have purchased at high prices to average by further investment. The district is the richest for tin of any in the county, as a reference to the returns of the different mines will clearly show. The fluctuations in the value of the lodes have been proved to be merely temporary; consequently, those who purchase when the shares are low are sure to make large profits. New Wheal Lovell, in 4000 shares, having the same lodes as South Lovell, are 1 1/2 to £2.

Bankers: London and County Bank.

ESTABLISHED TWELVE YEARS.  
INVESTMENTS FOR CAPITAL.  
Paying 10 to 30 per annum in dividends.

SHARP'S RAILWAY, BANKING, MINING, AND INVESTMENT CIRCULAR (Gratis and post free) Should be CONSULTED by SHAREHOLDERS and the public before INVESTING. It contains reliable information and sound advice to capitalists. Reports on Mines, Railways, Banks, Insurance, Docks, Loans, Gas, Water, and all Financial Companies, Record of Market Prices, and is the only SAFE GUIDE for the investment of capital.

HENRY GOULD SHARP, 32, POULTRY, LONDON, E.C.  
N.B.—WANTED TO PURCHASE, for cash, at net prices:—  
2 West Seton, £18 2 1/2. 1 Wheal Basset, £27 4. 5 Harodfoot, £29 4.  
Member of the Mining Exchange.—Bankers: London and Westminster, Lothbury.

WILLIAM WARD,  
29, THREADNEEDLE STREET, LONDON, E.C.

MR. HENRY BULLEN, MINE SHAREDEALER,  
has REMOVED from 1, Pinner's-court, to 1, GREAT WINCHESTER STREET, LONDON, E.C.

MR. H. B. RYE has BUSINESS in the FOLLOWING MINES (either as BUYER or SELLER, at a reasonable margin:—

St. Ives Consols. Drake Walls. Copper Hill.  
East Lovell. West Caradon. Ding Dong.  
Rosewarne United. Grambler. North Toigous.  
Kitty (Lellan). East Grambler. South Frances.  
South Basset. Wheal Jane. Bryntal.  
Tremayne. Carn Brea. Camborne Vant.  
New Rosewarne. Trencrom. Gonnema.

Mining Offices, 77, Old Broad-street, London, May 12, 1865.

MR. G. D. SANDY, SHAREDEALER, No. 48,  
THREADNEEDLE STREET, LONDON, E.C. (Member of the Mining Exchange). Correct Daily Price List issued gratis on application.

MATTHEW GREENE, STOCK AND SHAREDEALER,  
9, GRACECHURCH STREET, LONDON, E.C., has FOR SALE at net prices:—

5 Wheal Unity, 5s. 10 New Clifford, 30s. 5 Grambler, £5 10s.  
20 North Miners, 5s. 10 East Laxey, 35s. 6d. 10 Reineux Laxey, £4.  
20 North Laxey, 25s. 10 Long Lake, 25s. 20 Crebor, 35s.

LAXEY MINES (Sale of Man).—Mr. GREENE has just returned from visiting these mines, and can give every information to investors.

MR. GREENE'S "Daily Mining Share Price List" is in type in time for the evening mails, and contains the latest quotations up to the moment of going to press. Post free on application. Bankers: Imperial Bank.

MR. GEORGE BATTERS strongly recommends his friends to buy West Chiverton, Chiverton, Herodfoot, South Caradon, Devon Great Consols, Great Wheal Vor, Westworth Consols, and Stintney Wheal Metal for investment. These shares will pay good interest for money at present quotations.

Advertisements have recently been inserted in the columns of the MINING JOURNAL by dealers who, having sold shares for forward delivery, endeavour to tighten timid holders in order to possess themselves of their shares to fulfil their contracts; this system has been adopted particularly against Great Wheal Vor, West Chiverton, and Chiverton shares, and I caution my friends against parting with their property, or giving credence to the unfounded assertions of interested parties.—76, Old Broad-street, London, E.C.

WILLIAM BARTLETT,  
No. 2, BUCKLEBURY, LONDON, E.C.  
(Member of the Mining Exchange).

Having direct communication with the most experienced captains in Cornwall, is in a position to give disinterested advice as to the best paying investments.

SPECIAL BUSINESS in the FOLLOWING SHARES at fair market prices, and free of commission:—

5 Treawney. East Carn Brea. 10 South Carn Brea, 5s.  
10 Clifford Amalgamated. East Chiverton. North Shepherds.  
East Basset. East Greenville. North Basset.  
East Caradon. East Providence. 50 North Croft.  
Great Laxey. 50 Garlinda United. Pendennis Consols.  
Great Wheal Vor. 10 Grambler and St. Aub. Rosewarne Consols.  
Herodfoot. Great Caradon. 10 South Wheal Croft.  
North Trekerby. Great North Laxey. South Wheal Croft.  
Providence. Great South Chiverton. Stray Park.  
St. Day United. Great Wheal Bury. West Wheal Frances.  
Tincroft. Great Wheal Fortunes. Wheal Crebor.  
Wheal Mary Ann. 10 Great Wheal Fortunes. 50 Wheal Emma.  
Wheal Seton. Kelly Bray. Wheal Grenville.  
Chiverton. Lady Bertha. Wheal Harriett.  
5 East Lovell, £13 1/2. Mandlin. 20 Wheal Ida.  
Bottle Hill. 10 Nanglies. Wheal Uny.  
Crane. 100 North Jane. 50 So. Car. Hooper, 6s. 6d.

Telegrams immediately attended to.  
Cheques sent by post should be made payable to my order, and crossed "Alliance Bank."

WHEAL BULLER, and GREAT NORTH LAXEY.—The INVESTMENT and FINANCE AGENCY has received a report from its Special Agent, upon the prospects of these mines, and will be happy to advise parties desirous of doing business. CHARLES PETERS, Sec.

Shares WANTED, and ON SALE, in the FOLLOWING MINES, FREE OF COMMISSION:—

GREAT NORTH LAXEY. GUNNIBLACK (CLITTERS WHEAL BULLER.  
NORTH WHEAL BULLER. ADIT). WHEAL TREAWNEY.  
Any moderate number of shares can be dealt in at close market prices, for immediate cash settlement or otherwise.

ON SALE, 400 South Chiverton, at 5s. These must be applied for early, or an offer which has been made for the lot, at a fraction under the above quotation, will be accepted.

Apply to the INVESTMENT and FINANCE AGENCY. CHARLES PETERS, Sec.  
Offices, 12, Clement's-lane, Lombard-street, London, E.C.

MR. JOHN ROBERT PIKE, MINING AGENT AND GENERAL SHAREDEALER, 3, FINNERS COURT, OLD BROAD STREET, LONDON, E.C. Telegraph Messages receive prompt attention. Established Twenty Years in Cornwall and London.

Now ready, third edition, revised and enlarged, 1s., free by post for 15 stamps.

BRITAIN'S METAL MINES: A Complete Guide to their Laws, Usages, Localities, and Statistics. By JOHN ROBERT PIKE, 3, Finners-court, Old Broad-street, London, E.C.

## AUSTRALIAN MINES.

**KAPUNDA.**—The quantity of ore raised in Jan. was 162 tons of 20½ per cent. average produce, equal to 33 tons of pure copper. The quantity raised in February is estimated at about 300 tons. Since the last advices 41 tons of copper had been shipped.

**WORTHING.**—Bremer Mine: Expenses of the month, 1556l. 6s. 10d.; 45 tons regalia sold, 1018l.; and on hand 30 tons of regalia and 550 tons of ore ready for smelting; 300 tons had also been raised in the month of average quality. The acting manager reports that the reserves were extremely satisfactory, and the value of the mine increasing daily. They were sinking the engine-shaft under the 63 in the rich ore recently mentioned, and he adds:—"This month we have again the second furnace going at the mine, which will show its good effects in the next month's returns. You will note the accumulation of ore at the mine, which will, when returned, enable us to alter the company's financial position, and we trust to send you regular remittances for division among the shareholders." The number of hands employed on the mine was 154.

**YUDANAMUTANA COPPER.**—The country, I regret to say, is in a very sad state owing to the drought, but there is now every appearance of rain, and should we have a good fall of it carriage would soon be plentiful. I am in communication with several proprietors of horse teams, who will, when the wet sets in, enter into arrangements for carting. I have engaged freight for 7 tons of ore and 3 tons 14 cwt. of copper per Constantia, and hope to make the copper up to 30 tons. Capt. Anthony reports March 18.—"Blissman Mine: I have again to speak of drawbacks consequent on the long drought in this part. In the midst of that, and with no means of sending produce to port, you may judge that we are doing but little at the mine; in fact, no underground work has been done during the month, but during the greater part of that time three jiggling-machines have been kept at work, and a good result obtained. The furnace fire was lit on the 14th inst. We have since tapped three times, and made 21 pigs of copper of 2 cwt. each. I consider this the most satisfactory result we have yet obtained. We are expecting Frost's horse teams in a week from this time, when we shall have an opportunity to send away about 30 tons of copper and ore. I do hope that we shall get rain during the present month, when a better state of things would be realised."

**YORK PENINSULA.**—The operations during the past month have been successful. The main lode, at the 25 ft. level, has increased in width, and is producing a corresponding quantity of ore of the same description as before, but with a partial admixture of spar, which is expected to disappear in depth. We send you bill of lading for 25 tons of ore (of over 20 per cent. for copper) by the Constantia (part of that which should have been shipped per Fort Regent, which vessel was not able to take it) for London, to be followed by similar shipments, as favourable opportunities present themselves. When we commence to store large quantities of ore will be available for shipment, our operations being confined to driving on the lode. We do not require to draw by this mail.

**ENGLISH AND AUSTRALIAN COPPER.**—There were seven furnaces at work at Port Adelaide, and one refinery. The stock of coal at Kapunda was 720 tons, Koorunga 1161 tons, and at Port Adelaide and about 3050 tons. Since the date of the last advices further shipments of 266 tons of copper had been made.

**PORT PHILLIP AND COLONIAL GOLD.**—The quartz crushed during February, which includes five weeks' work, amounted to 4561 tons, with a yield of 1566 ozs. of gold, being an average of 6 dwts. 22 grs. per ton. The receipts for the same period were 2472l. 11s. 6d. Payments: ordinary, 1318l. 2s. 3d.; salt firewood, 438l. 2s. 3d.; 1733l. 4s. 6d. Profit, 719l. 6s. 11d. The return shows a slight improvement over that of January, both in respect to quantity of quartz crushed as well as yield of gold, being 87 tons per week of the former and 30 grains per ton additional yield. The quantity of quartz crushed is much less, however, than our present plant is capable of reducing, but we can hardly now be fully supplied with mineral until the surface works at both shafts are completed. As reported in my last, the agreement with the Clunes Company was duly signed, and came into force immediately. The schedules of stores, &c., have been made out, but the valuations are not finally settled, partly in consequence of the absence at the Ovens of Mr. Ruesler, who had the arrangement of this business on behalf of the Clunes Company. It will be some little time before everything works satisfactorily, and to the full advantage. The mine report will be transmitted with the usual half-yearly return next month; and, so far as I can judge, there will be a perceptible improvement in the appearance of the mine. The surface works at the south shaft are progressing well. The boilers for the north shaft have arrived, and are likely to be out at Clunes shortly. The machinery is all working very well, and with but few interruptions for repairs. The new stone-breaking machine has been got to work, and is answering exceedingly well, and will effect a considerable saving in this work.—Return for March: Quantity of quartz crushed, 3612 tons; yield of gold, 1004 ozs. 18 dwts. 12 grs., or an average of 5 dwts. 13 grs. per ton.

**FORTUNE (Western Australia) COPPER.**—Freight had been engaged for 304 tons copper and lead ore per *Amateur* and *Camden*. The fork at new engine-shaft is completed 7 feet below the 50, and skip-road finished to that point. I expect shortly to be in a position to drive north-east and south-west on course of the lode. The stopes in the back of the ore are now being worked by four men, the lode 2 ft. wide, producing 2½ tons of copper ore per fathom. The stopes in the back of the 30 have produced this month 3 to 4 tons lead ore of good quality, now working by four men; the lode 4 ft. wide. In the past two months we have opened ground in the back of this level about 7 or 8 fathoms long, that will produce 1½ to 2 tons lead ore per fathom. The four stopes in the back of the 80 are producing severally 1½ ton copper ore, 3½ tons lead ore, 3 tons lead, 1 ton copper ore, and 4 tons lead ore per fathom. New section 436, sinking by four men, at 47 ft. fathom; the lode 18 in. wide. With the exception of the 6 feet the lode has been 1 foot wide of solid lead ore of good quality. Section 437, driving by two men, at 47. 5s. per fathom; the lode 2 ft. wide, producing 2½ tons of copper ore per fathom. We have dressed 45 tons lead ore and 27 tons of copper ore of good quality, and have at the bay, ready for shipment, 393 tons of lead and 70 tons of copper ore.

**WHEAL ELLEN (South Australia).**—The 50 ft. level end, north of Square's engine-shaft, measured last survey-day 25 m. 3 ft. 1 in., making a total north of the shaft of 3 m. 5 ft. 4 in., and will yield 2 tons of 11 per cent. lead ore per fathom; the lode is at present split; we are driving on the eastern or hanging-wall portion. The winze is sunk 1 m. 4 ft. below the 50 ft. level, the lode varying from 1 ft. 6 in. to 2 ft. 6 in., and will yield 4 tons of 14 per cent. lead ore per fathom. The *Hindostan*, Adelaide to London, has on board 71 pigs of silver-lead, containing 260 ozs. of silver to the ton, on the company's account.

**SCOTTISH AUSTRALIAN.**—Lampton Colliery: The sales of coal during February amounted to 6929 tons. The coal continued of the same good quality, and Mr. Morehead, the general superintendent, has not yet returned from a visit to the colliery, reports the progress made, considering the slackness of the trade incidental to the summer season of the year, to be quite satisfactory.

**CADIANGULLONG COPPER.**—The quantity of ore raised and sampled during the month was 100½ tons, yielding on assay 13½ tons of fine copper, thus averaging nearly 13 per cent. In addition to the above a further quantity of 61 tons of dredge or disseminated ore was raised and laid aside to be crushed by the crushing machinery in the course of erection. The erection of the large engine and crusher was making good progress, and the numerous workings in the mine continued to be vigorously advanced. Ten tons of fine copper had been shipped to London per *Vineira*, 60 tons were in store at Sydney, 15½ tons more were in a forward state at the works, which it was expected would be made up to 30 tons, and dispatched to Sydney by the end of the month. The quantity of ore on hand was 340 tons. The *Champlain* writes:—"Capt. Holman's most recent communications I consider report a material improvement, and are, on the whole, decidedly favourable. It is very encouraging to have a good yield of good ore in the level driven from the bottom of Phillips' shaft, which is the deepest point reached by the workings in that section of the mine. We shall hope, after the crusher is erected, to have a much increased supply of ore to feed the furnaces. I look with a great deal of interest to the prosecution of further workings in the neighbourhood of Phillips' shaft, where there is the promise of a junction of lodes. The workings from the bottom of the engine-shaft, the lode, about to be resumed, are also subjects of interest, the lode having been satisfactorily productive there when last seen."

**GOLD MINING IN AUSTRALIA.**—From Melbourne we learn that a large quantity of machinery has been got up through the summer, and there will be a great addition to the number of mills at work this winter. One of the best yields announced lately from that part of the country was from the Loch Fyne Company's claim, 52 tons of stone producing 675 ozs., an average of 13 ozs. to the ton. We have heard of other large yields, but the exact particulars have not reached us through reliable sources. Some of the new machines have lately got to work at the Crooked River, but we have not yet been told of yields averaging more than 2½ ozs. to the ton. The returns from some of the older reefs in Gipps Land have been improving again, one lot of 100 tons crushed lately at Stringer's Creek having averaged 4 ozs. to the ton, another lot of 80 tons producing 254 ozs. A series of new reefs has been opened in one part the M'ivor district, but no mill is at work near, so little can be done to prove them. Several good yields have been obtained in the neighbourhood of Tarragona; for instance, 140 ozs. from 38 tons, 144 ozs. from 52 tons, 180 ozs. from 60 tons, 229 ozs. from 64 tons of stone, and so on. Nor has the Bendigo district been without its good yields, great as has been the want of water. Thus, a lot of 15 tons from one of the new reefs at Raywood produced 73 ozs. 19 dwts., and a small lot of 7 tons from Johnson's Reef 97 ozs. 8 dwts. A parcel of 17 tons from what is supposed to be the same vein, but in another claim, also produced 117 ozs. In the Castlemaine district proper the good yields have been few, but in the Daylesford portion of it some of the quartz-crushing companies have been getting large returns. The Ballarat district is little affected by the season, and no difference is to be noticed in the yields of the principal leads in it. The returns obtained by the Band of Hope Company were 1471 ozs. for the first week, 191 ozs. for the second, 753 ozs. 17 dwts. for the third, 830 ozs. 12 dwts. for the fourth, and 1000 ozs. 17 dwts. for the fifth. These variations in the yields were caused by breakages in the machinery, and consequent loss of time. The Koh-i-noor Company obtained 1004 ozs. for one fortnight, and 1000 ozs. 10 dwts. for the other; and the Great Extended Company 1945 ozs. 18 dwts. during the month. The Nelson Company is in good ground again, and getting their old average of about 100 ozs. a day, when not prevented by accidental stoppages. Of the other companies, none are getting returns quite equal to these, but some are very near them. The largest nugget of the month was one of nearly 100 ozs., found at Jones's Creek, and one of 50 ozs. has since been found near Crowick. Three or four have been turned up weighing between 30 ozs. and 35 ozs. each, and most of these have been taken from the new lead at Gooseberry-hill, near Dunolly, which has been rather prolific in nuggets of medium size.

**YUDANAMUTANA MINES CARTAGE.**—The large number of four-horse new colonial-made wagons, in the main streets on Friday, awakened a little curiosity as to their destination. They were 19 wagons and 40 horses, most of which looked capable of undertaking a long journey. They are to be employed in conveying ore from the Yudanamutana Mines to Port Augusta, under the superintendence of Mr. A. Frost, who has taken the contract for 13 months. They started from the company's office, in Currie-street, at about three o'clock in the afternoon, and will proceed towards Port Augusta. On the way the contractor contemplates adding 10 more to the number, and establishing depots on the road to the mine. Although engaged exclusively for the mine, it is probable, the superintendent (Mr. B. A. Fiveshew) informs us, that some arrangement will be made for supplying the settlers with provisions and materials on the return trips from Port Augusta, where, on the present occasion, the wagons intend loading with materials for the mines. It appears that the journey backwards and forwards can be made in 14 days, and that the quantity of ore ready for transit is very great—so great that the company would employ double the number of carters if they could obtain them. Two new jiggling-machines, which have lately been erected, are working well, and turning out a large quantity of ore.—From *Register*, March 4.

**THE BLISSMAN MINE.**—To-day 10 wagons and 40 horses started en route for Port Augusta, from the office of the Blissman Mine, Currie-street. These are the first instalments of Mr. Frost's carting plant, and will at once commence bringing down ore from the mine. Mr. Frost has, we understand, with great enterprise, made a contract with the company to bring down their ore to Port Augusta, the company undertaking to give him continuous loading. As soon as he has got fairly under way he means to double the number of his teams, as we are informed that there is at present sufficient ore at grass to keep 30 teams employed until the end of June next. The wagons are all colonial-made, and we believe the cost of the wagons and teams that started to-day amounts to something over £2000. The ore from the Yudanamutana is brought down to the Blissman by the teams of Mr. Worsnop, who some little time ago undertook the contract for this portion of the road. We wish Mr. Frost every success in an un-

dertaking which must prove of great general advantage to the northern portion of the colony.—From *Telegraph*, March 3.

**THE MOONTA MINING COMPANY.**—The directors have announced a dividend of 5l. per share, being the tenth dividend that has been declared.

**CADIANGULLONG.**—The first general meeting was held at Sydney, on Feb. 25. Attention has been chiefly directed to laying open the various lodes in West Cadia. The amount which has been expended since the commencement of the company's operations in mining and smelting costs is 12,565l. 11s. 4d. The ore raised amounted to 830 tons, and 590 tons was purchased from former proprietors; of this 1130 tons has been assayed, leaving 300 tons of dressed ore on hand. The expenditure of the company's working capital up to the end of January, including all outlay in building plant and laying open the mines, does not amount to \$6000. In excess of the value of the copper obtained, and ore, &c., on hand. The ores, regalia, copper, &c., on hand are valued at 7153l. 14s. 4d.

**ADELAIDE, MARCH 25.**—METALS: Bar and plate-iron remain about the same. Several large parcels of galvanised iron have been shipped during the month. Fencing wire has been largely dealt in, and prices have advanced in consequence.—COPPER: We are glad to say that the strike amongst the smelters at Wallaroo is now over, the men having gone to work again a day or two ago. Of course, the Wallaroo Company have none on hand. The price fixed by the Barra Company for their make since the arrival of the last English mail is 88l. per ton.—COALS: Continue much the same, although we have had several arrivals from Newcastle, New South Wales.—CHEMICALS: The market is bare of soda crystals, and they have been sold in parcels to arrive. There have been enquiries for refined saltpetre. There have been no sales of carbonate soda and tartaric acid.—ORES: We have heard of no sales of colza, or of boiled oils. The arrival of the *Andia* from New York with 3200 cases of kerosene has stocked the market for some time to come, and, considering the quantity sold, we may quote prices firm. Another arrival of kerosene from Boston, U.S., with over 1000 cases, is just to hand; but they have not yet been offered by auction.—*South Australian Register*.

The Hon. WILLIAM WEDD TUXFORD, of Adelaide, has been elected a member of the Legislative Council of South Australia, one of the most honourable positions in the colony, and an appointment which he will hold for a period of 13 years without interruption. As consequent upon his election, Mr. Tuxford was called upon to second the address in reply to his Excellency's speech on opening Parliament. Mr. Tuxford, whose claims depended mainly on his unceasing efforts to advance the agriculture of Australia, is one of the firm of Messrs. Tuxford and Co., who conduct a large business in Adelaide, the family of Messrs. Tuxford, the eminent agricultural machinists and implement makers of Boston, Lincolnshire; and a brother of the Messrs. Tuxford, of the Strand, London. The Hon. CHARLES BONNEY has also been elected a member of the Legislative Council.

## Original Correspondence.

## EXPLOSIONS IN COAL MINES.

Sir,—I see that Mr. Ansell promises to supply an instrument "by which owners, viewers, &c., can read the amount per cent. of the fire-damp in the air of any mine." I hope this will be fully realised, and if so it will prove the greatest boon to the coal miner which has been discovered since the introduction of the Davy lamp. I am old enough to remember the danger and uncertainty attending the "trying" the air by the candle previous to the use of the Davy becoming almost general, and even yet in some districts I am aware that the same clumsy mode is adhered to. The instrument alluded to if perfected will I fancy be of great value, and had it been discovered sooner might have been the means of saving many lives. It would be easy to point out instances where explosions have occurred, causing the loss of numbers of lives, where the agents have persisted to the last in saying that "she would not fire," the result being disastrous. Now, if an instrument had been at hand capable of showing the actual percentage of inflammable gas mixed with the air, the men would have been warned in time, and the calamity averted. I hope to see this fully realised.

Newcastle-on-Tyne, May 15.

M. E.

## DETECTION OF FIRE-DAMP IN COAL MINES.

Sir,—Will you allow me to reply to "E. D. H.," and to assure him that I adhere to every statement in my letter replying to "J. A. D." There is an innate objection to sending apparatus to exhibitions, unless one can also depute the explaining such apparatus to another. Mine is peculiarly liable to be subjected to false opinion, because it is based upon a law but little understood by the mass, even of chemists. I have found few who could conceive the rapidity and certainty of its action until properly explained to them. The apparatus seen by "E. D. H." was that which resulted from my first conception of the idea; it is now greatly simplified, and will be exceedingly cheap. Could "E. D. H." spare an hour, and give me a call, I should gladly show him that, although I use mercury, my scheme is not in any way subject to the same law as the barometer, nor does it in any way assimilate to that instrument. The objection raised by "E. D. H." that the indicator does not return to zero is an observation which strikes at the very root of my invention; it results from the fact that so soon as the gas (mine gas or other) has diffused into the chamber, and raised the mercury to its highest point, diffusion ceases, and then the pressure of the volume of mercury forces the new mixture of air and gas out through the porous cell, until the new zero of this mixture is reached, when the indicator remains stationary so long as the mixture remains unaltered; then, should the atmosphere become more pure, diffusion from the chamber takes place into the atmosphere, and the indicator travels backward, ultimately, if the atmosphere becomes pure, arriving at the original zero. The result is that unless the indicator stands at the natural zero there is evidence that the gallery still contains mine gas, and requires more ventilation. My object is to indicate the presence of the explosive gas by a means which will not be affected by any other substance or cause. Warning having been given, the instrument sets itself again in working order, when the gallery is purified. It is like a child, it cries till it is fed. This statement requires to be modified to such an extent as is due to the friction of a column of mercury, which also has to be noticed in the ordinary wheel barometer, &c., where it is necessary to tap the instrument gently, to see that the pointer indicates the true position of the mercury. In the apparatus which is intended to indicate the gradual accumulation of fire-damp in a closed part of a mine I use India rubber, and am wholly free from mercury. This apparatus is now complete, so far as it can be, until actually used, and all men know that at that time valuable suggestions occur.

In my letter I did not intend to imply that the mine gas was forced into an end; I simply meant that it accumulates in the gallery, whose roof becomes its upper boundary, while the atmosphere encloses it as with a wall. I have not a sufficiently large glass vessel to try the experiment indicated by "E. D. H.," had I one I can assure him that it is a popular error to suppose that the barometer would indicate any difference. It is manifest that if the contents of the vessel did not support the column of the atmosphere the atmosphere would rush in. The ancients said "Nature abhors a vacuum." In other words, the pressure is equal if the vessel be open at the bottom. If a glass tumbler be filled with air, and inverted over water, then sunk, the air within is slightly compressed; it is still lighter than water, but it exerts the same pressure as would an equal column of water, else the water would fill the glass.

Allow me, Sir, once more to say that Mr. De Beaumont wholly forgets the laws affecting the barometer, and that my proposition is not, even in the most remote degree, associated with his or any other plan yet proposed. It would be indecorous for me to express an opinion on Mr. Wilkinson's plan. I, nevertheless, requested a friend to point out to Mr. Wilkinson a source of error I detected at the first sight of his invention.

Royal Mint, E., May 17.

GEORGE F. ANSELL.

## THE SLATE QUARRIES OF WALES.

Sir,—It is doubtful whether your correspondents, "Caution" and a "Man of Experience," are doing justice to the designations they have assumed in speaking of the slate quarries of Wales. No one, whatever his temperament, questions the merit or the safety of the abstract virtues of caution and experience; but these qualities are as liable to misapplication or perversion as any of the graces with which human nature is endowed. It would not be difficult to suggest cases in which a morbid adherence to "caution," and an unreasoning deference to "experience," have proved fatal to golden opportunities. Private life is full of such instances, and neither of your correspondents can have lived much in the world of business if they do not know that many and many a legitimate enterprise has languished and failed from an excessive devotion to "caution" and "experience." Nor can they deny that in thousands of cases many, disregarding the charge of rashness, have prosecuted their designs with energy and perseverance, and have gained the rewards which "caution" and "experience," in the abstract, ignored and discredited.

But in prosecuting the slate industry of Wales, or in any other sort of quarrying, both caution and experience are necessary. Without their aid both time and capital may be hopelessly wasted; and, when the lessons derived from them are directed against companies got up for the mere purpose of transferring money from the pockets of shareholders into those of promoters, they are valuable lessons, however often they may be thrown away. But slate quarrying is not exclusively exposed to company making for the sake of promotion money. Hundreds of other industries, since the discovery of the virtues of limited liability, require from sanguine shareholders just the same warnings of caution and experience as slate is supposed to do; and our two mentors have only to look around them to find

ample scope for their literary powers in the easy task of setting forth the superior wisdom and understanding.

Granted that caution and experience are essential in successful slate quarrying, are these qualities all that are needed? Is there not such a quality as enterprise, and such another as perseverance? Where was Lord Palmerston's quarries have been at this moment if only "caution" and "experience" had guided the prosecution of the undertaking? And have there been no dismal hours from the suggestions of cautious and experienced men in the history of the Bangor and the Llanberis Quarries? A curious history might be written of the damps and discouragements in the way of beneficent undertakings by senile prophets, who misread the age they lived in, which are now in the prime of their success. It has ever been so—it will be so again; and the slate industry of Wales will depend upon it that so-called men of caution and experience will never wanting to try to cramp and hinder its development, under the shelter of maxims apparently true, but substantially false. For why on earth should the artifices of a grasping promoter, who may or may not succeed in his rapacity, be urged as valid reasons for permitting the natural resources of a great district to lie waste or dormant?

One of these authorities tells us that, though the demand for slate is still greatly in excess of the supply, the proportion between the yield of the quarries and the requirements of the buyer has been materially reduced. Where is the evidence of this alleged fact? A recent visit to some of the principal quarries satisfied my mind that, though the yield is increasing, the demand keeps pace with it; and certainly the enormous amount of building going on in every town in England, where the people will have slate roofs, is a practical confirmation of this contradiction. There is also good reason for believing that the foreign demand is increasing also. It is one of the defects in our trade tables, which are issued monthly, that they contain no account of the exports of slates. There is no export duty levied upon them, and no official means of ascertaining the quantities sent abroad; but I am much mistaken if the dock-masters' accounts, at Liverpool, for example, would not establish what I say. But admitting that the demand is not increasing, is it falling off? Men of "experience" and "caution" may assert that the yield is increasing, though that is in strong opposition to some other of their maxims and lessons, but they will have venture on the statement that the demand is lessening. But even if it is lessening, while the yield is increasing, what then? What so easy as to lower the price of slates? The profits are ample enough to afford a large margin for a reduction. And here I may say, by way of parenthesis, that I do not think that the last increase of price was absolutely necessary. Then it is said that out of 40 quarries opened or recommenced during the last two years, not more than one-fourth returns any profit. Before admitting this statement, one would like to see the authority upon which it is made. But assuming that ten out of the number only are working in profit, is that any reason for not prosecuting the remainder, which, it may be taken for granted, afford reasonable hopes of success? yet if they do not, we may also take it for granted that the losses incurred upon them are much more than compensated, as far as the public is concerned, by the profits of the successful ten. The fact, however, is that this is a kind of argument that is worth nothing at all. Out of any 40 concerns in the City of London you may, perhaps, find only 10 that pay well, while the other 30 are either unprofitable, or merely subsisting. That this should be the case with slate is no more a discovery to be held forth as a solemn warning, than the same thing would be a warning against any 30 commercial undertakings in London, Liverpool, or Manchester. It is the incidence of quarrying, mining, trading, or any pursuit, that something must be ventured before anything can be won, and that there are blanks as well as prizes.

Then a great sceptre is raised in the shape of bastard slates. "Experience" and "Caution" tell us that speculators have made the greatest mistakes by confounding the bastard with the true. Probably they have. Wiser men than those who are assumed to be speculators have at times, also, fallen into the error of taking the false for the true, and of buying an adulterated for a genuine article. Bastard slate may be taken by novices for true slate. That is true; but novices must acquire knowledge; and, as a rule, bastard slate is neither taken for true, nor is it produced or sold as true. Objection might be taken to the definition which "Experience" has given of bastard slate. It is not bastard merely because it contains oxides, or because it may not split into 20 in. by 10 in. Bastard slate is a very different thing in the estimation of practical men; and "Experience" may depend upon it that where there is only bastard rock even promoters will very seldom venture.

I agree that the slate-paying veins of Wales are by no means exhausted. So far from being exhausted, the best sets are only beginning to show their riches. There are many in places scarcely suspected; and, if I am not much mistaken, a large undertaking will shortly be in full and profitable work, by private parties, at no great distance from Lord Palmerston's, in a place barely known before. Let no one be afraid of risking his capital where there is a reasonable prospect of success; but "Caution" and "Experience" would, apparently, teach all men to button up their pockets, simply out of a morbid fear of loss. They are no true friends to North Wales, to the slate industry of North Wales, or to any other industry, or even to the trade of the country, who cry "wolf" in season and out of season. The public, as a rule, know how to protect themselves; and they have yet faith in the present and in the future of slate.

J. B. H.

**ROYAL SCHOOL OF MINES.**—Although for some time past the Museum of Practical Geology, in connection with the Royal School of Mines, has been in possession of an admirable collection of models of the most approved mining machinery and appliances, yet, owing to the fact that the space at the disposal of the officers was so limited as to prevent a systematic arrangement, it was almost impossible to ascertain the precise use for which a given contrivance was intended. The inconvenience has now been completely remedied by Mr. Hilary Bauman, F.G.S., Assoc. R.S.M., who has produced, under the direction of Mr. Richard Murchison, a Descriptive Catalogue of the Geological, Mining, and Metallurgical Models in the Museum, which is so replete with information as to leave but little to be desired. It is explained in the introductory notice that the models being distributed according to the available spaces in the Museum, it has been found impossible to notice them in the order in which they are placed; a systematic order has, therefore, been adopted, and by means of two tables of contents, the one arranged according to the nature of the models, and the other according to the positions of the models in the building. Many of the descriptions are highly interesting, even apart from the models which they describe, and contain much valuable practical information, which will, doubtless, cause the book to be read in many places beside the Museum itself, whilst after a single visit it will be especially valuable.

**GEOLOGICAL MAGAZINE.**—The May part of this magazine contains an unusually large amount of interesting information. The original articles include—the continuation of Mr. Ruskin's Notes on the Shape and Structure of the Alps, with reference to Denudation; On the Classification of the Cretaceous Beds, by Mr. Goldwin-Austen; and On some Deposits of Chert near Llandudno, by Mr. George Maw. In addition to these, there are the abstracts of foreign memoirs, reviews, reports and proceedings of geological societies, natural history of cities, and field clubs, correspondence, and miscellaneous matter. Two plates and several well-executed woodcuts accompany the number, and materially aid in the elucidation of the papers.

**URE'S DICTIONARY OF CHEMISTRY.**—The twenty-sixth part of Mr. Watt's edition of this dictionary extends to "Nitrogen, oxides, and oxygen acids," so that it may be assumed that the work will be completed in the four volumes, as promised. The irregularity with which the parts have been issued has, no doubt, been a source of some little annoyance to many of the subscribers, who are particularly interested in subjects which will occupy that part of the work; but they may congratulate themselves upon the circumstances that the admirable manner in which the whole of the articles are written for more than the compensations for the slight delay. The article on Naphthalene, in the May part, by Mr. Greville Williams, is extremely interesting, yet it is scarcely fair to allude especially to any individual article, from the evident care which has been bestowed upon all parts of the work.

**INFORMATION FOR RAILWAY PASSENGERS.**—An interesting little book of facts and scraps connected with railways, and, therefore, well calculated for reading during a journey, has just been issued by Messrs. Murray and Co., of Paternoster-row, under the title of the "Book of Information for the Railway Traveller and Railway Officials." It is the production of Mr. R. Bond, the Superintendent of the Newport Station of the Great Western Railway, and contains information upon almost innumerable matters, all written in a popular and readable style, and in the most concise manner possible. Whether the reader desire to learn the innominate relative to the carriage of children, corpses, or perambulators; or to study the details of break of gauge, getting into or alighting from a train in motion, or to study something of the portions of railway law affecting travellers, his requirements will be amply met; whilst the happy manner in which the anecdotes and poetic quotations have been introduced is sure to secure the book an attentive reading.

**HYDRO-CARBON GAS.**—The invention of Mr. W. Henderson, of Valparaiso, consists in the introduction of dry steam to the retorts containing paraffin, or other substances, heated to their own intensity, and in preventing any reduction of the temperature during the process of making the gas; by using means he obtains an illuminating gas, consisting of a combination of the hydrocarbon with the volatile carbon of coals, gas, and oleaginous substances. The chief feature is the use of retorts with false bottoms, beneath which the steam is admitted.

**MACHINERY FOR BREAKING STONES.**—Mr. A. Thomas, of the Wharf, Cardiff, proposes a solid cylindrical roller, mounted upon a truck, and actuated by a suitable engine thereon, to which the stones to be broken are fed upon an inclined table, capable of adjustment, according to the size to which it is required to break.





## BRITISH MINES.

**CWM ERFIN.**—July 16: The lode in the shallow adit level, going east of the boundary, is 4 feet wide, and worth 2 tons of lead ore per fathom. This level has now reached the back of about 20 fathoms from the surface. The lode in the 16, going east of Robert's winze, is 1 yard wide, and worth 3 cwt. of lead ore per fathom. Those men will now go to the adit level, which will have about 5 fathoms more to go. The lode in the 16 workings below. The lode in the deep adit level, going east of the boundary, is all the breadth of the end, composed of clay-slate, quartz, blende, and lead ore, worth from 2½ to 3 tons of the latter per fathom. This level has now reached a back of 60 fathoms from surface, and is 55 fathoms in advance of the shallow adit level. The lode in the different stops over the back of the deep adit level will yield, on an average, 1½ ton of lead ore per fathom, and the lode in the 16 workings below, will yield, on an average, 1 ton of lead ore per fathom regular and well exposed. The lode in the 16 workings below,

ent of the boundary 2 feet wide, containing clay-slate, quartz, and spots of lead ore. The lode in the rise over the back of this level, 90 fathoms east of the boundary, is 5 feet wide, and worth 1 ton of lead ore per fathom. The lode in the stopes over the back of the 10 will yield, on an average, about 25 cwt. of lead ore per fm. The 20, going east of the boundary, is 20 fms. long, and contains the lead lode. The lode in the stope of the 20 is 10 fms. wide, composed of clay-slate, quartz, and spots of lead ore disseminated throughout, yielding dressing work of a fair quality. The lode in the various stopes over the back of the 20 will turn out, on an average, 15 cwt. of lead ore per fathom. All the machinery on the mine is in good working order, and the future prospects good.

CWMICKET.—May 18: The new shaft is now down to the depth of 10 fms., and the lift of pumps put in preparatory for pumping. The small wheel is erected, and will

DARREN. R. Williams, May 15: There is no improvement in the stope in block of the 16 west. I will write again as we open on the lode.

— R. Williams, May 17: We placed some of the men who were engaged stoping in the back of the 15 west to open a piece of lode further west between the stope and the cross-cut south; there were to be seen only two or three small strings and spots of ore

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but on blasting out more of the ground, and further up, we opened on a good stone of ore, and the lode at this point looks well. In the course of the week we shall probably strip the whole of the lode as far west as the cross-cut, and you shall hear the result. We have not begun the slope in the bottom, nor shall we until we have fully opened the lode at the point mentioned above. From a blast in the 15 east yesterday, we discovered some very good stones of lead and copper; the lode has assumed a more promising appearance than for some time past.

**DALE.**—H. Niles, May 17: The improvement in the bottom course of the Pipe vein continues, and there is every prospect of further improvement. The other parts of the mine are without alteration.

**DEVON AND CORNWALL.**—T. Neill, May 16: William and Mary: The lode in the winze sinking below the 22 is worth from 16 to 18 tons of ore per fm. The lode in the winze-shaft is producing good stones of ore.

**EAST CARN BREA.**—T. Giverville, J. Scholier, May 17: No. 3 Lode: In the 70, driving east of the cross-cut, the lode is producing 2 tons of copper ore per fm. In the 60, driving east of Thomas's shaft, the lode is producing 6 tons of ore per fm. In the 50, driving east of Thomas's shaft, the lode is producing 1 ton of ore per fm. In the 40, driving east of Thomas's shaft, the lode is producing 1 ton of ore per fm. In the 30, driving east of Thomas's shaft, the lode is producing 1 ton of ore per fm. In the 20, driving east of Thomas's shaft, the lode is producing 1 ton of ore per fm. In the 10, driving east of Thomas's shaft, the lode is producing 1 ton of ore per fm. In the 0, driving east of Thomas's shaft, the lode is producing 1 ton of ore per fm.

**Tutwork Setting for May.** The 80 fm. level cross-cut to drive north of the old engine-shaft, by six men, at 51. The 70 to drive east on No. 3 lode, by six men, at 41. The 60, level to drive east, by six men, at 41. The 50, level to drive east, by four men, at 51. The 40, level to drive east, by four men, at 51. The 30, level to drive east, by four men, at 51. The 20, level to drive east, by four men, at 51. The 10, level to drive east, by four men, at 51. The 0, level to drive east, by four men, at 51.

**EAST DAREN.**—May 16: Taylor's Shaft: In the 116 east the lode is about 1/4 yard wide, producing stones of ore at times, but not a sufficient quantity to set a value on. In the 104 east the lode is from 5 to 6 ft. wide, producing about 1 1/2 ton of lead ore per fathom; and about 5 fms. behind this end we have commenced sinking a winze to ventilate the level below; the lode in this winze is from 5 to 6 ft. wide, yielding 1 1/2 ton of ore per fathom. In the 92 east the lode is from 2 to 3 ft. wide, composed of a clay slate, carbonate of lime, but unproductive of lead ore at present; we have suspended the driving of this level, and put the men to sink a winze about 6 or 7 fms. behind the fore-breast, in a lode from 6 to 7 ft. wide, producing saving work for dressing, of a low quality. In the 82, west of boundary winze, the lode is still large, and hard for exploring, producing small stones of ore at times, but not to value. In the 80 east the lode is about 1/4 yard wide, principally composed of clay-slate, carrying a little lead, but not a sufficient quantity to value. In the 68 east the lode is from 3 to 4 ft. wide, producing about 1 1/2 ton of ore per fathom. In the 50 east the lode is about 1/4 yard wide, a little improved since last reported, now producing from 4 to 5 cwt. of lead ore per fathom. The stopes and pitches throughout the different levels still continue to yield their usual quantities of silver-lead ore. Our machinery, with all surface work, are progressing satisfactorily.

**EAST GREAT WORK.**—J. Lean, May 18: The ground in the engine-shaft is not quite so hard as it has been, but will be easier days before we shall be fairly through the capels, which are about 5 feet thick. The lode in the 10 west is without alteration to notice. The moor shaft, which is sunk 10 fms. below the shallow adit, has lately gone dry; we have commenced to sink this at 42s. per fathom. We have about 6 fathoms to sink to communicate with the 10.

**EAST GUNNISLAKE AND SOUTH BEDFORD.**—J. Phillips, May 18: At Gard's shaft the men are at present engaged in fixing the lift under the 36; we hope to have this completed by the end of next week. We have met with the lode in the 36, east of the slide; it is about 3 ft. wide, and producing good stones of ore. We have the elvan to the south of the lode, but not a good mineralized kilias. In the deep adit we have just met with another cross-course about 6 in. wide; beyond this we have not yet seen the lode, but up to this point there has been a gradual improvement, which we believe will continue on the other side of it. In the rise in back of the deep adit the lode has improved, and is now worth 1 ton, or 101, per fm., with every appearance of a further improvement.

**EAST JANE.**—T. Hodge, May 17: The engine-shaft is below the 36 nearly 8 fms., the ground in which is favourable for mineral. The lode in the 36, south end, is looking well, and will yield full 12 cwt. of lead per fm.; there is a part of the lode standing to the east, the value of which is not known, but, judging from the lode gone down in the level above, we expect to find it productive when cut through. Lob's pitch in the back of the 36 will yield 6 cwt. of lead per fm. In Matton's pitch the lode will yield 6 cwt. of lead per fm. The lode in the 26, north end, is looking more promising. The lode in the adit end north is 3 feet wide, composed of spar, flookan, white carbonate of iron, and lead, a kindly lode. All other places are without any particular change. Our general prospects throughout the mine are much improved.

**EAST LAXEY.**—R. Rowe, May 16: The masons and mechanics are fast progressing with the erection of the wheel. In the deep adit level, driving on No. 1 lode north, there is no change to notice. In the 10, east of the adit driving south, I am of opinion that the lode has crossed the level, and is now in the level. We have put the men to drive on what we at present believe to be the east and west lode, and to-day saw some eyes of lead and copper through it. By another week I expect to be able to speak more definitely whether it is the right lode or not.

**EAST ROSEWARNE.**—J. James, May 18: In the 85, east of Hallett's, the lode is 8 in. wide, worth 51. per fm. In the 85, west of Hallett's, the lode is 1 ft. wide, producing good stones of ore. In the 75, east of Hallett's, the lode is small and poor. In the winze sinking below the 75, west of Hallett's, the lode is 18 in. wide, worth 301. per fathom for the length of winze, 10 ft. In the 75, east of King's, the lode is 18 in. wide, worth 61. per fm. In the 75, west of King's, the lode is 18 in. wide, worth 181. per fm. There is no change to notice in the 65, west of King's; we expect an improvement shortly. The stopes are much as reported last week.

**EAST SNAFFELL.**—R. Rowe, May 16: The lode in the deep adit level, driving south, is 1 ft. wide, and without any change. There is nothing new in the shallow adit. No. 1 lode, in the adit level driving north, has a more promising appearance; the level is yet only a few feet from the surface. We expect further improvements as we get more into the hill, and the winze rises nearer us.

**EAST ST. JUST UNITED.**—J. Cartwright, P. Cauley, May 16: We are getting on well with our work by the aid of the water-wheel. We are pumping the water and drawing the stuff from the Cranck shaft; now down 7 fms. below the deep adit, and hope to clear to the bottom by next week. Ageworth, North Boarner, and the engine-shafts are being proceeded with as last reported.

**EAST TREKREBY.**—H. Kneucker, May 16: The lode we interested in the cross-cut north has improved; and as far as can be seen it is a very promising looking lode, with good spots of copper, mandle, blende, tin, and lead. The 30 east is improving for tin; it is worth 41. per fm. In the 20, east of the 30, the lode is 18 in. wide, worth 301. per fathom for the length of winze, 10 ft. We have again resumed the driving of the 30 cross-cut north; the ground is favourable for driving; judging from its appearance we shall soon get to more lode a little further north. The tributaries' pitches are much the same, making good progress.

**EAST WHEAL ELLEN.**—R. Pryor, J. Garland, T. Corfield, May 12: The lode in the deep adit level, east of the shaft, is 3 1/2 feet wide, composed of mandle and peach, with good stones of copper ore throughout—a kindly lode; we have set the end to-day to four men, at 51. per fathom. This end is now getting near the elvan course. The lode in the 101, east of the 100, is 3 ft. wide, composed of mandle and flookan, but at present a little disordered by the latter; set to-day to two men, at 41. per fathom.

**EAST WHEAL GRENVILLE.**—George R. Odgers, William Bennetts, May 17: The lode in the engine-shaft sinking below the 75 is without any change. The lode in the 75 east is 2 1/2 feet wide, with mandle, stones of ore, and a little tin—a kindly lode. The ground in the 75 cross-cut north is favourable for driving. The lode in the 75 west is 3 feet wide, yielding good ore and tin, worth from 151. to 181. per fathom—a strong and very promising lode. The lode in the 65 west is 2 1/2 feet wide, and producing some good work for tin, worth about 101. per fathom. All the other places are looking the same as before reported.

**EAST WHEAL LOVELL.**—P. Quantrell, May 17: South Lode: We are driving east and west at the 40, with six men, at 101. per fm.; the lode is opening well; it is not so large east as west, and I value it at 401. per fm. east and 601. per fm. west; this lode is opening a rich piece of tin ground above this level, and will, when driven on a few feet, enable us to rise against the shaft in a rich lode, which will be of great importance. Turnpike Lode: The shaft is now below the level where the tin has been reported on east, and we hope shortly to be in a position to drive to intersect the ground.—North Lode: The shaft is sunk 6 fms. below the 40, and in consequence of the westing dip of the tin ground we have resumed stopping westward in the rich tin ground. We can sell next week a good parcel of tin, if wished.

**EAST WHEAL RUSSELL.**—J. Goldsworthy, May 16: We are taking down the lode in the 130 east; it has improved, and produces from 1 to 1 1/2 ton of yellow copper ore per fathom. No other change.

**J. Goldsworthy, May 17:** At Homersham's shaft the necessary work below the 120 is nearly completed to the 140, which had been completed ere this if the chain had not broken, and damaged the shaft between the 88 and 110, which will occupy the greater part of this week to repair. The ground in the winze sinking below the 130 is favourable, and good progress is being made. In the 130, driving west, and west of Soper's cross-cut, on the south part of the north lode, the part being carried is 4 feet wide, composed of gossan, quartz, priam, peach, and mandle, and producing a little black oxide of copper; the same remark will apply to the eastern end, on the same part of the lode. In the 130, driving east on the main part of the lode, the lode is 4 ft. wide, composed of capel, quartz, priam, mandle, and copper ore, producing of the latter 3 tons, or worth 201. per fathom; the lode presents a healthy appearance, and a further improvement is expected. In the 77, driving west of Northery's cross-cut, on the north part of the lode, the part being carried is 4 feet wide, worth 81. per fathom. In the 45, driving east, the lode is 4 feet wide, composed of capel, quartz, and mandle, and producing a little yellow and black oxide of copper ore. In the 88 cross-cut, driving north-west of Hitchens's engine-shaft, the ground is favourable, good progress is being made, and the stratum is highly mineralized.

**J. Goldsworthy, May 19:** Telegram: In the 130 east the lode has improved, producing 4 1/2 tons, and worth from 251. to 301. per fm.

**EAST WHEAL TOLGUS.**—May 17: Redruth Consols Lode: In the 34, east of Jones's shaft, the lode has much the same appearance as for some time past; it is about 20 in. wide, composed of spar, mandle, and peach. The ground in the 34 cross-cut is hard.—Little's Lode: In the adit level, west of new shaft, the lode is not quite so large as when last reported, now 1 ft. big, consisting of spar and gossan.—Hocking's Lode: In the adit level, east of the cross-cut, the lode is 14 inches wide, composed of spar and kilias. In the same level, west of the cross-cut, the lode is 1 ft. wide, consisting of spar and kilias, and producing occasional stones of ore—looking promising. The ground in the adit cross-cut south is moderately easy.

**EAST WHEAL YOR.**—James Pollard, May 17: In the engine-shaft sinking below the 80 no lode was taken down this week. The stratum of ground in the shaft looks well for bearing tin, but not so favourable for progress. In the 70, driving west, the lode continues the same size, and producing stones of tin—a kindly lode.

**FORTESCUE CONSOLS.**—Wm. H. Wilcock, May 18: The lode, as I anticipated, has changed its character from the mass of mandle it has carried for the last 10 fathoms of our drive to the antimony silver-bearing ore; I had not time to announce this favourable result in last week's Journal; however, I am now enabled to state its continuance, and not only so, but the ore course is opening out still larger, great blocks of it being broken and brought to surface daily, some from 1 to 2 cwt. each of silver mineral. I trust now with these prospects we shall be able rapidly to increase our pile of ore, and we have every appearance of having a very large deposit to work away at for a long time, which should enable us to make continuous returns.

**FURZE HILL WOOD.**—Wm. Doldge, May 17: We have made the dam in the 40 cross-cut north secure, and hope it will answer the purpose well. The water has very much decreased, so that we are able to make good progress in sinking the engine-shaft,

which we are pushing on with all possible speed.—No. 1 North Lode: The lode in the back of the 40 east is 3 ft. wide, composed of capel and peach, worth 61. per fm. The engine and machinery are working well.

**GAWTON COPPER.**—G. Rowe, May 13: In the 50 cross-cut, north from engine-shaft, we have intersected a branch or portion of the lode; so far as seen it is 9 in. wide, producing fine stones of ore, from which a small quantity of water is issuing. There is no change in the appearance of the lode in the 36 west since last reported on.

**GOLICH HILL.**—May 17: The lode in the 60 end, driving north from shaft, is 4 in. wide, composed of clay, spar, and a little lead—about 3 cwt. per fathom; the end is looking more promising than it has for some time. Harvey's shaft is now down 6 1/2 fms. below the 54; the lode in the bottom is composed of clay, spar, tumbler, and a little lead ore, but not enough to value. We are troubled a little with the surface water at the shaft.

**GOTHIC.**—J. Williams, May 12: The miners working on tribute in back of the 25, after only working two stems, cut into a course of ore yielding 1 1/2 ton per fm.; this discovery is on the south side of the lode, and appears to hold back behind all the old workings to the west of the engine-shaft; this course of ore is worth fully 201. per fm., and we can break it down for 60s. per fm. The ore ground in the back of the adit is also improving, and these pitches leave about one-third of the gross ore money profit. I have never seen the prospects so good as they now are since I have been on this mine.

**GREAT BRIGAN.**—John Tredinnick, May 17: The water is gone down from the western shaft, and we have resumed the sinking of the same below the 42. In the end driving west of the western shaft, at the 42, the lode has become rather disordered by means of soft kilias coming in between the elvan and the lode, present value 71. per fm. I have put a pile of men to stop a piece of ground in the back of the 42, west of the above shaft, where the lode is worth for copper ore 81. per fm. In the eastern part of the mine we are driving by the side of the level. Nothing further to notice since the report for the general meeting.

**GREAT DEVON AND BEDFORD (Colcharion).**—J. Richards, May 18: At the 50, driving north, the ground appears to be a little more favourable. The lode at the 40, driving east, is full 2 1/2 feet wide. There is no alteration in the character of the same since I reported to you last week. The lode at the same level driving west is getting larger within the last day or two, being 1 ft. wide, and is composed of capels, mandle, spar, and some spots of copper ore, with a quantity of water coming from the lode; we may reasonably expect an improvement here daily. At the 30, driving west, the lode is not as yet cut through the same; as far as cut into it is composed of mandle and spar, with a little copper ore, but not in paying quantities; notwithstanding this; it has a most healthy appearance.

**GREAT EAST LOVELL.**—J. Burgan, May 18: We have commenced to sink the new engine-shaft perpendicular below the nose of the bob. The engineers have nearly completed the erection of the engine; next week we shall put the boiler in its place, with its fittings, &c. The other works are going on favourably.

**GREAT LAXEY.**—R. Rowe, May 16: The south, or copper, ground continues without any special change. Some of the stopes in the roof of the 155 are yielding very well for copper, and in a sump below this level we have a lode from 8 to 9 ft. wide, worth 10 to 12 tons of rich copper and 1 ton of lead per fm. In the 165, and lately resumed, the lode is 3 ft. wide, and contains a little copper, though not sufficient to value. The 190 end is in a large lode, width not known, but so far unproductive, and exceedingly hard. We are at present driving obliquely through the lode, to get to the other side, when we hope to make better progress, and I have very little doubt we shall yet find the copper ground setting down in strength ahead of us. Our prospects in the north mine are not only very good, but continue to improve, as will appear by the present value of each of the principal ends now driving north—the 190 end worth 1501. per fm.; the 165, 1007. per fm.; the 110, 1101. per fm.; the 70, driving north of Dumbell's, now greatly improved, worth 1101. per fm.; the 30, driving north of Dumbell's, 1501. per fm.; the 70, in Dumbell's, and the 110 are of even increasing interest. In the 70 we have driven 20 fms. north of Dumbell's sump, all in rich ore ground, and the present improvement is of greater importance, as, judging from all the upper levels, we expected that we had reached the end of this run of ore ground. I am also opinion, from present appearances, that the 110 end, notwithstanding the great length of rich ore ground it has already opened out, is only now really entering Dumbell's run of ore—a conclusion strengthened by its increasing value at this moment; and, if so, we have all that the 70 has discovered, as well as what is being discovered at this end. To say the least, our prospects in this part of the mines are exceedingly good, and the value of rich reserves from their ever-increasing extent, as pointed out by the different levels, cannot safely be estimated. On the whole, both in returns and prospects, nothing can be more satisfactory than the present state of the mines.

**GREAT NORTH DOWNS.**—J. W. Crase, M. Jenkin, May 17: From the appearance of the ground, and the increased quantity of water in Vivian's engine-shaft, sinking below the 67, it is in our opinion the same is in the capels of a lode, which from its nature and underlie, as seen at the 20 fm. level cross-cut, in all probability is Tenpenny lode; the ground is still very hard and troublesome for sinking, but we expect when we get through these capels, or lode, to have a change for the better. The lode in the 57, driving east of Jenkin's shaft, is 2 ft. wide, worth 101. per fm. The lode in the 57, driving west of King's shaft, has a promising appearance; the part being carried is 4 ft. wide, worth 101. per fm. The water at Sleggan's shaft has gone down sufficiently to enable us to stop the back of the 70 west, which we set yesterday at 21. per fm.; the lode is worth 251. per fm. There is no other change since the report for the meeting.

**GREAT NORTH LAXEY.**—R. Rowe, May 17: The lode in the engine-shaft is 3 ft. wide, with a good rib of lead in the north end, and has all the appearance that when the new cross-cut is driven in, we shall at once enter upon a good lode in this direction, and the ground here is in whole for more than 30 fathoms high. The great quantity of water we lately tapped in the shaft now appears to have come from the south, in which direction I have no doubt there is standing an open and productive lode. I intend to sink the shaft 6 feet deeper, and then drive out the new levels north and south. The lode in the 60 fathom level end, driving south, still holds good, 4 feet wide, and worth 1 ton of lead per fathom. The winze sinking below the 60 is down 4 fathoms; the lode is 2 ft. wide, worth 1/2 ton of lead per fathom. No change of note elsewhere.

**GREAT RETALLACK.**—W. H. Reynolds, May 18: The adit end is at present rather stiff for driving. In No. 9 shaft we have cut a branch 8 or 9 inches wide, containing mandle, flookan, &c.

**GREAT SOUTH TOLGUS.**—J. Daw, May 17: Friday last was setting-day. In the 166 east the lode is 1 ft. wide, composed of peach and mandle; driving by six men, at 71. per fm. In the rise in the back of the 166, west of shaft, the lode is 2 ft. wide, producing a little tin, but not enough to value; rising by four men, at 31. 10s. per fm. In the 154 east the lode is 2 ft. wide, producing 3 tons of copper ore per fm.; driving by six men, at 61. per fm. In the rise in the back of the 154 west the lode is 1 ft. wide, unproductive; rising by four men, at 41. 10s. per fm. In the 140 east the lode is 1 1/2 ft. wide, producing stones of ore; driving by four men, at 31. 10s. per fm. The winze below this level has been holed to the 154; in the last 6 fms. sunk the lode will average 6 tons of ore per fm. In the 140 west, on the tin lode, we have commenced to sink a winze, in which the lode is 4 ft. wide, worth 81. per fathom for tin; sinking by four men, at 61. per fm. In the 100, east of Noel's shaft, the lode is 1 ft. wide, producing good stones of ore; driving by four men, at 81. per fathom. The stopes are looking well both for tin and copper.

**GREAT WHEAL BUSY.**—J. Edwards, J. Tredinnick, C. Bawden, May 18: There is no change to notice in the 150 cross-cut, south from Harvey's engine-shaft, since last reported. We have intersected a branch or portion of the lode at the 140, south from Fielding's shaft, have cut into the same about 18 inches, and have broken therefrom some rich stones of tin; it is letting out water freely. We have tested the value of 6 ft. of the lode at the 140, west of the No. 2 cross-cut, east of engine-shaft, and find it to be worth 451. per fm. for tin and copper. No lode has been taken down in Offord's shaft below the 140 for the past week. In the 140 east end, from Offord's shaft, the lode is 3 1/2 ft. wide, worth for copper and tin 181. per fm. We are obliged to suspend the sinking of Fielding's shaft below the 140 for the present in consequence of water. The lode in the 140, west of the 140, is 3 ft. wide, worth 101. per fm. The lode in the 140, east of the 140, is 3 ft. wide, worth 101. per fm. The lode in the 140, west of the 140, is 3 ft. wide, worth 101. per fm. The lode in the 140, east of the 140, is 3 ft. wide, worth 101. per fm.

**GREAT WHEAL METAL.**—W. Chappell, May 18: The water is again in fork at the engine-shaft, and the men engaged sinking on the course of the lode, which is 2 ft. wide, producing mandle, quartz, and tin disseminated throughout the lode, with strong indications of a speedy improvement; the bottom of shaft is 14 fms. below surface. From surface down to within 4 fms. of the bottom of the shaft the lode has been taken away by the ancient workers, both east and west of shaft, for over 200 fms. in length. The lode in the bottom of the north-western shaft, which is 7 fms. below surface, is 14 in. wide, producing tin. We have driven the 4 in. level west of the 140, and the lode is 1 foot wide, producing rich tin stuff, although so very shallow. In the north-eastern shaft the lode is 1 foot wide, composed of priam, quartz, and producing tin throughout, and looks very promising to make a rich lode for tin in depth, being parallel with and in the same channel of ground as the lode which the engine-shaft is sunk on, where the lode has all been taken away for 10 fms. below surface for over 200 fms. on the course of the lode. As soon as we get the north-eastern shaft down 6 ft. deeper, we shall then at once commence to stop both east and west of the shaft. The masons and carpenters have completed the building of the smith's shop and the material house. All that is required to make the mine a dividend mine is the completion of the necessary machinery. I feel satisfied that Great Wheal Metal is a mine that will enrich the shareholders.

**GRYLLS WHEAL FLORENCE.**—Edward Rogers, Edmund Rogers, May 16: The engine-shaft is down 3 ft. below the 12; no lode has yet been taken down, in consequence of the ground being hard our progress is rather slow. At the 12, driving east, the lode is 6 ft. wide, producing tin stones that will just pay for stamping; at this level west the lode is 2 1/2 ft. wide, yielding a little tin, but not enough to set a value on.—South Lode: Piper's shaft is down 8 fms. 3 ft. from surface; the ground is at the level of the 120.

**GWYDYR PARK CONSOLS.**—W. Smyth, May 17: No change to notice in Gwyn Liddon adit since last reported. The shaft is also without change; the water seems still increasing. I have got up the pumps out of No. 10 shaft, and am preparing them for the new shaft. There are now nine men in the shaft, and we are sinking with all speed; there were as good stones of lead and blende taken from it to-day as any I have seen yet. No change in Gwydyr stopes or middle level since last reported. We shall take down the lode next week. I hope the box of specimens from the lode in the shaft arrived safe. The water having increased in the shaft, I am preparing a lift of the pumps, the lode being very dry. I expect we are draining the old men's shallow workings.

**HAWKMOOR.**—J. Richards, May 16: The stopes in back of the 25 fathom level, east of the eastern engine-shaft, is worth 2 tons of copper ore per fm.—West Hawkmoor: The No. 4 lode is 2 ft. wide, composed of quartz, capel, and some good work for tin ore. The stopes in back of the No. 3 lode are producing some good work for tin ore. In the rise we are making good progress.

**HALLENBEAGLE.**—E. Richards, R. M. Kito, May 13: Pinniger's engine shafts have been engaged for the past week in taking down the lode in the north end of shaft, which is 2 feet wide, composed of peach, mandle, spar, and good stones of copper ore, now purpose of sinking a pit north, when we shall at once case and divide the shaft from the 44 to the 56, which will enable us to draw the stuff with the steamwin from the bottom level, when we hope to make greater progress in cross-cutting north and south. The lode in the sump-winze sinking below the 44, on the north lode, is 4 feet wide, worth 121. per fathom. We have cut in east from the end of the winze in the past week, and drained the water from below the slide to the bottom, and also drained the eastern winze. We have resumed the sinking of No. 2 winze, where the

lode has improved, is now 18 inches wide, worth 161. per fathom for the length of the winze, 10 ft. The lode in No. 3 winze, sinking below the 44, is the north lode, 1 1/2 ft. wide, worth 251. per fathom for length of winze. We have laid a pit to cut the east of Stone's shaft, where the water has drained from 3 ft. to 4 ft. since Tuesday last. We hope in a few days it will be dry to the bottom; the lode in this pit is 1 1/2 ft. wide, worth 101. per fathom. The water is draining satisfactorily throughout the mine.

**HARWOOD.**—J. Race, May 15: No. 1 stop at Scar Head is worth 1 1/2 ton of ore per fathom. No. 2 stop is just up to good ground, and worth 1 ton per fm. The ore is not as fast; I have not begun to cross-cut here yet, having had a man about the mine. We have an improvement at Trough in the level going north. The cross-cut is opening and looking better, and is likely to improve. We are preparing dressing here as fast as possible.

**HINGTON DOWN CONSOLS.**—T. Richards, May 17: Bailey's engine-shaft, sinking below the 120, is improving, and may now be valued at 201. per fm. for the length of the shaft, 13 ft. In the 120, east of Bailey's engine-shaft, the lode is worth 201. per fm.; in the same level west it is worth 251. per fathom. The stopes in back of the level, west of the shaft, is worth 401. per fm. The stopes east of the shaft is worth 251. per fm. The lode in the 110 west the lode is worth 101. per fm. The stopes in the back of the level are worth on the average 201. per fm. The 100 west is without change. The rise and stopes in back of the 85 are worth 201. per fm.

**KELLY BRAY.**—G. Rowe, May 17: The lode in the new engine-shaft, sinking below the 25, is very much improved, both in size and character, being full 4 ft. wide, composed of a beautiful gossan, quartz, mandle, and ore, presenting every indication of the priam and mandle. The lode in the 70 east is 18 inches wide, principally composed of quartz, and good stones of ore; this shaft is down nearly the required depth for the lode, and the good stones of ore are in cutting level, &c.; a few days more, and we shall have resumed the driving of the 41 east; the lode here is about 2 ft. wide, composed of mandle, quartz, and mandle, intermixed with ore. We expect to have about 16 fms. of winze taken down 3 ft. wide, composed of mandle, peach, iron, quartz, and ore, worth on the latter 2 1/2 tons, or 101. per fm. We are just now cutting through the great course, which we hope to see accomplished in a few days.

**LADY BERTHA.**—Capt. Harper and Metherell, May 15: In the eastern shaft, sinking below the 41 east, the lode is about 3 feet wide, composed of peach, mandle, and good stones of ore; this shaft is down nearly the required depth for the lode, and the men are, therefore, just now cutting ground in the 41 east for the tram-way to pass over the ore, quartz, and mandle, worth of the former 3 tons, or 121. per fm. We have resumed the driving of the 41 east; the lode here is about 2 ft. wide, composed of mandle, quartz, and mandle, intermixed with ore. We expect to have about 16 fms. of winze taken down 3 ft. wide, composed of mandle, peach, iron, quartz, and ore, worth on the latter 2 1/2 tons, or 101. per fm. We are just now cutting through the great course, which we hope to see accomplished in a few days.

**LAVINET.**—J. Treagar, May 13: The sumpmen have completed the timbering of the shaft, and next week we shall set the sinking below the 12.

**MINERA UNION.**—W. T. Harris, May 18: Brabner's Shaft: The pitch in bottom of the 80 yard level is worth 1 1/2 ton of lead per fathom, and improving as we go down. The pitch in back of this level, south of No. 2 winze, has very much improved, worth 1 1/2 ton of lead per fm. The pitch in bottom of the 60 yard level, north from winze, is not so productive as last reported, but I anticipate an improvement shortly.—William's Shaft: This shaft has been communicated with the 60 yard level, and the men are at present engaged in driving a cross-cut to the 60 yard level, and the kibble to draw from this level, after which we shall commence to drive south, the pitch in bottom of this level, north of shaft, is worth 1 1/2 ton of lead per fm. No other change to report in any other part of the mine.

**MOLLAND.**—T. Bennet, May 17: The ground in the engine-shaft, sinking below the 62 is still close and troublesome for sinking, being composed of kilias, mandle, and hard limestone, traversed by veins of spar. The lode in the stopes in back of the east is 6 feet wide, producing ore throughout at the rate of 1 ton per fathom. In consequence of the ore being disseminated throughout the lode it is evident that we are not obliged to turn over a large quantity of stuff for a small quantity of ore. The lode on which we are driving in the 32 east is about 6 in. wide, producing good stones of ore.

**NEW CONCORD.**—T. Foote, W. Neill, May 17: We have not been able to do much in regards sinking the winze in bottom of the 50 during the past week, having had to put in timber to secure the ground in the back and side of the 50 over the water level, the lode is about 2 ft. wide, composed of mandle and capel. The lode in the 50 east the lode is 2 1/2 ft. wide, principally composed of mandle—a very strong looking lode.

**NEW TRELEIGH.**—S. Meehill, May 17: There is scarcely any change in the level for the past week. We have met with a large stream of water in the 80 fm. level, and the men are at present engaged in driving a cross-cut to the 80 fm. level, and the kibble to draw from this level, after which we shall commence to drive south, the pitch in bottom of this level, north of shaft, is worth 1 1/2 ton of lead per fm. No other change to report in any other part of the mine.

**NEW WHEAL LOVELL.**—John Vivian, May 8: The engine-shaft, sinking in the last 2 fms. sinking. Where seen it is 18 in. wide, producing tin, with very strong indications. In the course of a week from this time they will be in a position to commence to drive the 30 east and west of this shaft, under the tin ground seen in the 20 fm. level. The 20, driving east of engine-shaft, is extended 25 fms. east of shaft, a lode varying from 1 to 2 ft. wide, and almost all this driving producing tin, in places 101. per fm. The shaft is standing up to the old miners' workings, which is a very good sign, and the 10, driving west of engine-shaft, is 18 in. wide, worth 301. per fathom for the length of winze, 10 ft. In this level the driving has been only a few fathoms before this end; lode for the last 6 to 6 fms. driving has been ordered and split into branches, and only producing a small quantity of tin in the present end. The lode has a more promising appearance for tin, and is better defined, the branches falling together, making a lode 18 in. wide, producing good stones of tin, with indications of further improvement. The new shaft mentioned is about 8 fms. east of this end, and there is a large cross-course a little to the east of this new shaft, which the lode always makes good deposits of mineral. The 20, driving west of engine-shaft, is extended 18 fathoms west of shaft. In this level the driving has been only a few fathoms before this end; lode for the last 6 to 6 fms. driving has been ordered and split into branches, and only producing a small quantity of tin in the present end. The lode has a more promising appearance for tin, and is better defined, the branches falling together, making a lode 18 in. wide, producing good stones of tin, with indications of further improvement. The new shaft mentioned is about 8 fms. east of this end, and there is a large cross-course a little to the east of this new shaft, which the lode always makes good deposits of mineral. The 20, driving west of engine-shaft, is extended 18 fathoms west of shaft. In this level the driving has been only a few fathoms before this end; lode for the last 6 to 6 fms. driving has been ordered and split into branches, and only producing a small quantity of tin in the present end. The lode has

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lawry, and within 20 fms. of Ludcott boundary, brought 271. per ton, and we have reason to hope, not only from analogy, when we get through the elvan in Ludcott we shall get better ground, and a richer lode, as already we have in the 130, at Wheel Wray, towards Ludcott, a very favourable change of ground. Wheel Wray gave regular dividends above the 60, after which they got into a darker, fiercer, and harder character of ground, costing in driving from 121. to 151. per fm. Their workings, when not in the lode, were principally on the eastern side of the lode. In the 120 we have got on the western side, and have already proved a channel of ground to exist of the right sort, for 40 fms. in length, which we can slope at 30s. per fm. Further north, opposite the engine-shaft, in the 140 (levels only driven 7 fms.) we have bored a hole in the western side of the lode 7 fms., and have, undoubtedly, ground which can be wrought twice as cheap as the ground on the eastern side; and in this channel of ground we do expect an improvement in the quality of our ore, partly because it is more congenial for lead and silver, and partly knowing that similar effects have followed similar changes in the mines referred to. And I am not satisfied yet but that another lode, or part of the main lode, on which at surface good ore have been raised, is standing in entire whole ground in the north part of the shaft, and if so would be easily available from the main lode or part at different levels. The shaft extends for more than one mile in length on the course of the lode. The lode has always retained its size in hard as well as soft ground, and is now, throughout the bottom part of the mine, 3 ft. in width, composed of all the characteristics which constitute a lead lode.

— Peter Eddy, May 18: Our ends have a little improved, and likewise two slopes. WHEAL MARGERY.—R. James, W. Rogers, May 18: The American shaftmen are cutting ground for winze, plat, barrow-road, &c., at 114, in order to sink below. In the 142, east of the American, the lode is worth 47. per fm. In the 142 west, the lode is worth 121. per fm. In the 152 east the lode is worth 51. per fm. In the 152 west the lode is producing stones of copper ore. In the 110 east we are still cross-cutting north and south to find the lode to the east of the cross-course; this is a very important point, as the lode has not been seen at any point to the east of this large cross-course. The tribute on the whole, is about the same as it has been for some time past.

WHEAL NORRIS.—John Andrews, May 18: At our setting to-day the following bargains were let:—Carter's shaft to divide and ease from the 45 to the 57 fm. level, to take out penthouse at the 45, and make everything complete for bringing the kibbles to the 57 fm. level, by nine men, per bargain 101. The 45 to drive east of Carter's shaft, on No. 4 lode, by six men, at 47. per fm. In the past week we have taken down over 8 fms. of lode in this end, the first 5 ft. producing very good work for tin. In the present end the lode is not so good, being now 3 ft. wide, and worth 51. per fm., with every indication of a speedy improvement. The 45 fm. level cross-cut to drive south of Carter's shaft, by six men, at 121. per fm. The 35 end east to drive east of cross-cut, on No. 5 lode, by four men, at 27. 10s. per fm.

WHEAL UNION.—Thos. Giamville, May 12: Tutwork Setting: The flat-rod shaft to sink below the 88, by nine men, at 501. per fm. In bottom of the shaft the lode is 4 ft. wide, composed of spar, munitie, and copper ore, producing 1 ton of the latter per fm. The 76 to drive east of the flat-rod shaft, by six men, at 121. per fm. The 70 fm. level cross-cut to drive north of the flat-rod shaft, by two men, at 47. per fm. The 20 cross-cut to drive north of the flat-rod shaft, by two men, at 47. 10s. per fm. The engine-shaft to sink below the 40, by nine men, at 801. per fm. The old engine-shaft to sink below the 30, by nine men, at 111. per fm. The winze to sink below the 20, by two men, at 57. per fm.; the lode is producing 1 ton of ore per fm. The 60 cross-cut to drive north from East Carn Brea, by six men, at 151. per fm.

WHEAL UNITY CONSOLS.—Wm. H. Reynolds, May 18: The lode in the flat-rod shaft continues to yield 1 ton of ore per fm. The lode in the winze below the 70 is large, and yielding good work for grey copper ore. In the 60 fm. level cross-cut we have another part of the lode, west of the cross-course, containing good grey and black ore, but the main part we think is still before us. Other parts are without any change of importance.

WHEAL UNY.—S. Conde, M. Rogers, May 13: The lode in the engine-shaft is worth 251. per fm. for the length of shaft, 12 ft. The incline-shaft, sinking below the 110, is worth 151. per fm. for the length of shaft, 9 ft. The 120 east and west of engine-shaft, is worth 107. per fm. The 110 east of engine-shaft, is worth 107. per fathom. The 110 west of incline-shaft, is worth 121. per fm.

### MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

CARTELL CARN DOCHAN returns for the week 2 ozs. 2 dwts. of Gold, from experimental trials on 4 tons 11½ cwt. of ordinary lodestuff. The alterations of the new stamp will cause a few days' delay.

At GWYNEDD Mr. Spence and Mr. Readwin have been making, during the week past, experimental trials of the effects of Mr. Crocker's invention of introducing sodium into quicksilver. All the sulphides and other minerals of the Dolgelly district, heretofore antagonistic to the process of amalgamation with quicksilver in its usual state, were subjected to a severe test, with sodium amalgam, in Britten's amalgamating machines, and at the end of every experiment the quicksilver was perfectly bright. It is reported that the results were highly satisfactory. The process is about to be tried on a large scale.

WEST TRELAUNY.—This mine, situated a little to the east of the Carn Brea Mines, is attracting considerable attention in the neighbourhood, from its good geological position, and the fine lodes which are being opened by the manager. Its favourable situation, on the junction of the slate with the granite, seems to have been hitherto overlooked, and speculators are so satisfied with its value that shares are being taken up freely in the neighbourhood. There are ten lodes in the set (which is extensive), from one of which great returns were made by the old men. Several others have also been backed by those indefatigable pioneers of mining. The three lodes now opened show signs of great promise—indeed, are more indicative of success than the gossans raised from the backs of the lodes on the eastern junction of the Carnmarth granite with the slate, which lode returned such immense profits. When it is known that the whole of the ground adjoining on all sides of this property has been worked, or is now being worked, and that these mines have all made rich discoveries, resulting in enormous profits, this property seems almost divested of the usual speculative character almost inseparable from mining. These remarks are justified by the real facts we have the guarantee of such men as Capt. Pope, Henry James, and others, whose thorough practical knowledge of mining is well known. The result of the development of West Trelawny is looked forward to with much interest.

GUNNILLAKE.—A new engine has been started at Clitters Mine, which during the present proprietors' working has returned about 20,000l. worth of copper, all raised above the adit level; and to develop the mine in an efficient manner below this level the pumping-engine, which was set to work on Saturday, has been erected, in addition to two other engines already working. The owners of the soil are the Duchy of Cornwall and the Rev. H. W. Beaufort. The sett is known to contain 12 lodes, with a similar number of lodes, and the manager is Mr. R. T. Skinner, and the superintendent agent Capt. W. Skewes, of Orelake.

TAMAR BANK GRANITE QUARRIES (Gunnillake).—These quarries, under the able management of Mr. George Southey, have become very important, exceeding anything of the sort that has been or is at present in operation in the district, an instance of which was noticed on Monday. The quantity of granite rock removed (by one single blast of 5 lbs. of gunpowder only) was 140 tons, a portion of which was a single stone or block of granite, of superior quality, computed weight 43 tons. These quarries are connected with the bank of the River Tamar, and are wrought into a hill of granite 140 ft. above the river level, the angle of the layers of granite giving an unrivalled advantage for procuring blocks of superior size.

SOUTH CALLINGTON.—This mine, situated in one of the best districts in Cornwall, is now likely to come before the public on its merits. There are two very important points worth noting, and the shareholders will, it is hoped, be amply rewarded for their patience and outlay. There is an improvement reported in the 12, from which a rich silver-lead has been raised, worth about 207. per ton. The mine is in 1024 shares, and upwards of 5000l. has already been expended.

CHENVER and WHEAL ABRAHAM.—It is a fact that materials belonging to these mines are seized by the sheriff, and advertised to be sold on Monday? Surely the adventurers should find the necessary funds for carrying on the mine for a short time longer, when there is such a good chance of returns of mineral shortly.

EAST JANE.—This mine has further improved: the lode in the 36 fm. level is now worth 12 cwt. per fathom, while all parts of the mine are showing a much better appearance than last week. They propose sampling 12 tons of lead on Saturday.

EAST LOVELL.—The south lode, recently intersected in the 40 cross-cut, has been explored east, where it is worth 401. per fm.; and in the same level, driving west, the lode is worth 601. per fm. The agent states that this lode is opening out a rich piece of tin ground, and when driven on for a few fathoms, they will be able to rise against the shaft, which has gone down through several fathoms of rich tin ground, worth 201. per fm. In the 120 east, an improvement is reported, and will open out some reserves of tin ground. The operations upon the Tarnpils and north lodes are progressing satisfactorily. A good parcel of tin will be sold next week.

At NORTH TREKERRY, when it is considered that a course of ore was gone over in the 100 east for between 30 and 40 fms. in length, and that two winzes sinking below this level are worth 10 tons of ore per fathom, and also that the 110 east is coming into the same course of ore, and that a stream of warm water is issuing from the 110, the inference is that there will be a splendid mine. A stream of warm water is a sure forerunner of a large deposit of copper ore. It was so at Clifford United Mines and several others.

EAST CARADON.—In November last Captain Secombe's advice to the shareholders was:—"I hope you will not dispose of your interest at the present price (then 191. per share). I consider our chances of discovery to be very good." And at the last meeting (April 19) he reported as follows:—"Since the last meeting the 80 east, on the caution of its length and the probable piece of ground, has been opened, and we had in the 70 over. From the strong lode seen at the 80, together with the other points of interest in the set, as yet undeveloped, I consider our chances of discovery for the future are very good." The shareholders should keep these reports of so competent and upright a man as Capt. Secombe in mind, and not be frightened into selling their shares so much under their real value as the present market price is, by the artifices of speculators. Rather let every present holder add to his holding at these low rates.

The last report from GREAT LAXEY (which will be found in its proper place), if carefully compared with the plan, will prove to be the most important that has ever emanated from the mine. In the deep mine, as anticipated, the 165 (now worth 1001. per fm.) has entered on what is, undoubtedly, the same bunch of ore as that discovered immediately under, in the 190, worth 1501. per fm., both levels entering wholly new ground. At Dumbells, also, the prospects have considerably brightened. The 110, after passing through some 35 fms. of ground, worth in some places as much as 3001. per fm., would appear to be only now entering on the run of ore setting down at Dumbells, whilst the 70 above, which has been driven through a rich run of ground for 20 fms. north at the sump, is worth 1001. per fm. (another report says 1501.), and the sump itself, down to the 85, continues worth 1501. per fm. Any comment on the richness of this part of the mine, and the immense amount of reserves increasing continually, would be superfluous.

GUIDE TO MINING.—Mr. Thomas Spargo has nearly completed the arrangements for the publication of his "Statistics of the Mines of Cornwall and Devon." The plans are engraved, and the descriptive matter is in the hands of the printer, so that the work may be expected in about a month. All the mines in work will be described; and its value will be increased by a partial list of the contents, which will be inserted in next week's Journal.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending May 14 was 11,970l. 12s. 8d.

With last week's Journal we gave a SUPPLEMENTAL SHEET, in which appears a Plan and Description of the Great Darren Mining District, North Wales—Silver Mines of Nevada: the Underground Workings—Alloys of Metallic Manganese—Extracting Gold from Sulphides—Gas in London—The Coal Question—Coast Basin of New South Wales—Vicinal Railways in France—Factory Chimneys—High-Speed Compressed-Air Hammer, &c., &c.

### The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, MAY 19, 1865.

COPPER.				BRASS.			
Best selected	4 s. d.	4 s. d.	4 s. d.	Sheets	Per lb.	Per lb.	Per lb.
Tough cake & tile	91 0 0	—	—	Wire	94 0 0	—	—
Burra Burra	91 0 0	—	—	Tubes	94 0 0	—	—
Copper wire	1 0 1 0 1/4	—	—	STEEL.			
Ditto tubes	0 0 0 0 0	—	—	Swedish, in kegs (rolled)	13 5 0-13 15 0	—	—
Sheeting & boiler plate	93 0 0-95 0 0	—	—	(hammered)	14 5 0-15 5 0	—	—
Bottoms	100 0 0	—	—	Ditto in faggots	16 0 0-16 10 0	—	—
Old (Exchange)	91 0 0	—	—	English, Spring	18 0 0-23 0 0	—	—
IRON.				QUICKSILVER (per bottle).			
Bars Welsh, in London	7 12 6-7 15 0	—	—	Per ton.	—	—	—
Ditto, to arrive	7 7 6-7 10 0	—	—	Foreign	21 15 0	—	—
Nail rods	8 10 0	—	—	To arrive	21 15 0-22 0 0	—	—
Stafford, in London	8 15 0-9 15 0	—	—	ZINC.			
Bars ditto	8 15 0-11 0 0	—	—	In sheets	26 0 0-26 10 0	—	—
Hoops ditto	9 15 0-10 10 0	—	—	TIM.			
Sheets, single	10 7 6-11 0 0	—	—	English, blocks	97 0 0	—	—
Pig No. 1, in Wales	4 10 0	—	—	Ditto, Bars (in barrels)	98 0 0	—	—
Redmed metal, ditto	4 0 0-5 0 0	—	—	Ditto, Redmed	100 0 0	—	—
Bars, common, ditto	6 15 0-7 0 0	—	—	Banca	97 0 0-98 0 0	—	—
Do, merchant, Tynes or Tees	7 10 0	—	—	Straits	97 0 0-98 10 0	—	—
Ditto, railway, in Wales	6 15 0-7 5 0	—	—	TIM-PLATES.			
Ditto, Swed. in London	12 0 0	—	—	IC Charcoal, 1st qua. p. bx.	1 8 0-1 10 0	—	—
To arrive	12 0 0	—	—	IX Ditto 1st quality	1 14 0-1 16 0	—	—
Pig No. 1, in Clyde	2 14 3-2 18 6	—	—	IX Ditto 2nd quality	1 6 0-1 7 0	—	—
Ditto, L.C.B. Tynes or Tees	2 9 6	—	—	IX Ditto 3rd quality	1 12 6-1 13 0	—	—
Ditto, No. 3, 4, L.C.B. do.	2 6 6-3 5 6	—	—	IX Coke	1 2 6-1 3 9	—	—
Railway chairs	5 10 0-6 5 0	—	—	IX Ditto	1 8 6-1 9 9	—	—
" spikes	11 0 0-12 0 0	—	—	Canada plates	13 10 0	—	—
LEAD.				In London; 20s. less at the works.			
English Pig, ordy. soft	19 15 0	—	—	Yellow Metal Sheathing...p. lb.	80-81 1/4 d.	—	—
Ditto (WB)	21 5 0	—	—	Sheets...p. lb.	84-85 1/4 d.	—	—
Ditto sheet	30 5 0	—	—	Indian Charcoal Pigs	7 0 0-7 10 0	—	—
Ditto rod lead	22 0 0-23 0 0	—	—	In London			
Ditto white	26 0 0-27 0 0	—	—	At the works, 1s. to 1s. 6d. per box less.			
Ditto patent shot	23 0 0	—	—				
Spanish	19 0 0	—	—				

REMARKS.—The intelligence received from America, announcing the severe measures determined upon by the President, is not reassuring to the commercial world, as it shows that matters are far from being in a settled state; while it augurs ill for the future. We are fearful it may have a prejudicial effect upon the metal trade, which it was hoped would have been much benefited by the return of peace. We must, however, wait the course of events, to see what may be the result of those steps which are now being taken by the Government in America, and earnestly trust that nothing may arise to retard the return of more satisfactory commercial relations with that country. The advices from India, also, are not of a satisfactory kind, and are not calculated to lead to the expectation of much increase of business in metals at present with that part of the empire. During the past week, however, there has been rather more activity in the Metal Market, and there appears to be a general improvement in the tone; a very fair amount of business has been done in some metals, and orders still continue to be given out rather more freely; there is, however, a want of that life and activity which is so usual at this period of the year, and the return of which has been so long anxiously desired by all engaged in the metal trade. We cannot, however, expect that the return to vigour will be sudden; it must take some time before commercial affairs generally recover the various shocks which have been received, and it is only thus that we can expect the metal market again to become active.

COPPER.—The market for this metal has remained quiet during the week, and the amount of business done has been limited. The price of sheets is somewhat easier, and they can now be obtained at 931. per ton.

IRON.—In Staffordshire the iron trade continues active, and there are very few cases in which the works are not in full operation. At present, however, there is little sign of renewed demand from the United States, orders from thence being of very small amount. The puddlers are manifesting a disposition to find fault on trifling grounds, and as their executive is encouraging the North Staffordshire strike, there is a feeling of uncertainty as to their future course. In Welsh there is a cheerful tone in the iron trade, although it cannot be said that any improvement has taken place. There are considerable orders for railway iron on the books, and there is also a fair enquiry for bars and other descriptions. Rails are quoted 61. 15s. to 71. 5s. per ton at the works, and bars at 61. 5s. to 67. 15s. For the week ending May 11, the exports were 1781 tons. In Swedish iron prices still continue firm. In Scotch pig-iron the market has not been very active during the week, and prices have rather declined. At the commencement of the week prices were—54s. 1 1/4 d. to 54s. 3 1/4 d. cash, 54s. 4 1/4 d. to 54s. 6d. one month, but declined to 54s., 53s. 9d. cash, and 54s. 3 1/4 d. one month; and afterwards to 53s. 4 1/4 d., 53s. 3d. cash, and 53s. 9d. to 53s. 6d. one month, at which a fair amount of business was done; the market then became a little firmer, and business was done at 53s. 4 1/4 d. cash, and 53s. 7 1/4 d. one month. The last advices from Glasgow announce a rather better feeling, and a moderate amount of business has been done at 53s. 6d. cash, and 53s. 9d. to 53s. 10d. one month.

LEAD continues quiet, the present quotations being 191. 6s. for common English pig, 191. 15s. for LB, and 211. 6s. for WB.

TIN.—The market for Straits has remained steady at 931. 10s. during the greater part of the week, but at the close it has become rather easier, and may now be quoted at 931. to 931. 10s. cash. Banca may be quoted 971. to 981.

SPELTER has continued to advance, and considerable business has been done at 221., 221. 10s., and 22s. 15s., on the spot, and 221. for forward delivery, but lately the market has become easier, and the price on the spot may now be quoted at 211. 15s.

TIN-PLATES remain without any material change, but buyers do not appear quite so ready to purchase as a fortnight ago; this circumstance, however, has not affected the trade, as makers are not disposed to sell under present prices.

STEEL.—Holders of foreign have been compelled to submit to lower prices, in order to clear off stocks now on hand.

QUICKSILVER may still be bought at the quotation.

BIRMINGHAM, May 19.—Rylands' "Iron Trade Circular" reports a livelier feeling, with more enquiry for manufactured iron and prices of pigs. In the former a better business was done, and some few pigs moved off at slightly advanced prices. Makers of favourite brands are full, as are some of second and commoner makes, while others are seeking dealers, and anxious to make sales. The North Staffordshire Strike is now defeated and over. It is to be hoped that the men may find continuous work. We still mark unaltered prices, although American buyers are said to be in the market.

### THE LIVERPOOL METAL MARKET—MAY 18.

FIG-IRON.—The market has been very dull and flat all the week, with no speculative tendency; prices close to-day at 54s. 3d. to 54s. 9d., No. 1. The policy shown by President Johnson tends to depress this market still further.

MANUFACTURED IRON continues to improve. Orders are dropping in from the States, and we are encouraged to think much larger ones will follow. Rails especially are improving both in price and demand, and large makers, in South Wales principally, are filling their books fast. There can be no doubt that when matters are finally settled in the States, and trade properly adjusted, there will be an immense demand for all descriptions of railway plant. Welsh bars continue to improve, and are quoted at 61. 15s., L.C.B., South Wales. Most of the leading houses in Staffordshire are full of orders, and in good spirits, and the days of the North Staffordshire strike are numbered. Swedish iron is improving in price, as London stocks are reported to have run very low; quoted, 131. 10s. to 131. 15s.

LEAD.—The market continues very flat, and prices depressed; transactions have been very limited.

TIN.—No change to report—demand rather poor, but prices maintained.

TIN-PLATES.—Makers are taking advantage of the recent improvement to push off old stocks, which brings a few cheap lots on the market, but bona fide orders cannot be placed at anything less than our last quotations.

We are in hopes of tin-plates continuing to improve steadily for some time to come.

SPELTER has improved considerably during the last fortnight, owing principally to the smallness of the stocks at home and abroad; quoted, 211. 10s. for forward delivery. Zinc had advanced 27. per ton, and is quoted 271. 10s. in Liverpool.—COPPER continues without change.

### IMPORTS OF ORES, &c., FROM APRIL 24 TO MAY 6:—

3386 tons of sulphur ore.	578 sacks of copper.
4109 quintals of sulphur ore.	345 sheets of copper.
13,350 quintals of brimstone.	2 barrels of copper.
245 packages of lead and silver ore.	4 packages of old copper.
717 bags of copper and silver ore.	1628 tons of manganese ore.
180 pieces of iron planking.	1357 bags of cobalt ore.
2476 sacks of tin.	11,700 quintals of copper ore.
13 bars of tin.	847 bags of copper ore.
16 cases of zinc.	149 tons of copper ore.
84 cases of zinc.	247 barrels of copper ore.
1 barrel of zinc.	23 crates of copper ore.
556 tons of pig-iron.	203 plates of pig copper.
9 packages of old metal.	2294 pigs of copper.
8 sacks of scrap steel.	97 tons of chrome ore.
260 cases of nails.	4020 quintals of copper regulus.
1828 bags of silver ore.	3683 sacks of copper barilla.
11,108 bags of copper ore.	2512 bags of copper barilla.
2379 ingots of copper.	

### EXPORTS FROM APRIL 24 TO MAY 6:—

Bar	1242	Angle	5
Roof	232	Knee iron	10
Hoop	139	Fish plates	10
Sheet	305	Pipes	3
Pig	590	Galvanized sheets	141
Railway	1169	Tyres	8
Plate	354	Railway tyres	3
Swedes	38	Rolls	68
	19	Tin-plates	37,888 boxes

The MINING SHARE MARKET has been moderately active this week, with a fair average amount of business transacted in dividend and progressive mines; but the principal feature has been the rise in North Shepherds shares to 81. 94. This rise has not been caused by any change in the mine or its prospects, but by large purchases made for investment; and on the account-day it was found that nearly all the shares so purchased had been sold by "bears," who had no shares to deliver, and found a difficulty in getting them even at present quotations. In a majority of instances "bearing" on a large scale is eminently successful, and has lately proved very profitable in East Gunnislake; but it was evidently a mistake for the same parties, who made great gains there, to try on the same game at North Shepherds, where there are only 2000 shares altogether, and the majority of them held by gentlemen of rank, wealth, and position, who originally embarked in the mine with a view to see it out, and have never been sellers; on the contrary, they are always ready to buy; and acting on the reports of their agents, who expect a discovery in the 30 before long, we understand many of them have been increasing their interest, and on demanding the delivery of what they have purchased have caused the present state of affairs. Whether, therefore, the shares are, in reality, worth 21. or 201., is not the question now at issue. At present all at the mine is prospective; but the indications, according to the most reliable sources, are of a very favourable character. Wheel Buller shares have not been so firm, and leave off 20 to 25 per 512ths; the lode in the 80 has been cut into about 6 feet, tiny, and with stones of ore. In the level above the lode was 12 feet wide, and when cut through in the 80, and driven upon, away from the influence of the cross-course, it will, probably, become equally productive. At the meeting, on Tuesday, the accounts showed a loss on the two months of about 3001. The shares were subdivided into 512ths, and a call of 11. per share made. The committee of management are Messrs. R. Davey, M.P., H. Grylls, and John Hay; purser, Mr. John Mitchell. Bottle Hill, 11s. to 12s.; Carn Cambora, 27s. 6d. to 30s. Clifford Amalgamated, 291. to 301.; we understand there is an improvement in the mine for tin. Cook's Kitchen, 10 to 101.; East Basset, 121. to 151.; East Carn Brea, 61. to 71.; East Gunnislake and South Bedford, 30s. to 35s., and the mine improving; East Lovell, 13 to 131.; East Wheel Grenville, 31. to 311.; Frank Mills, 71. to 81.; East Caradon, 121. to 131.; the 80 east, on the counter lode, is valued at 121. per fathom; the 80 west, 101. per fathom; the 90 east, 81. per fathom; west, 151. per fathom. Great Laxey, 19 to 201.; Great South Tolgus, 21. to 211.; Great Wheal Vor, 32 to 331.; Marke Valley, 5 to 51.; North Basset, 15s. to 17s. 6d.; North Roskear, 14 to 151.; Pendean, 21. to 211.; Old Gunnislake, 10s. to 15s.; Providence Mines, 31 to 321.; South Condurrow, 81. to 91.; Stray Park, 13 to 141.; Tincroft shares have advanced to 18, 19. Redmoor shares have been in good demand, and advanced to 6s. 8s.; the lode is expected to be cut in the 40 early in June, and the appearances at present are of a most favourable character. While the public have been neglecting this mine, and shareholders getting tired with calls, many hundreds of shares have been picked up by practical agents around the mine, and by the captain himself; in fact, everything would seem to point to a good mine at an early date. The shares have cost the majority of holders over 17. 10s. each, and there is no reason why they should not soon reach par.

East Russell shares rose to 4, 41 on Wednesday, on receipt of a telegram that the lode in the 130 was worth 201. per fm., and leave off 41 to 411. Tolvadden, 25s. 6d. to 25s.; West Seton, 1821. to 1871.; Wheel Basset, 871. to 921.; Wheel Crebore, 37s. 6d. to 40s.; Wheel Grenville, 31. to 311.; Wheel Rose, 36 to 381.; Wheel Seton, 2021.

**Total** ..... 2258 £20,780 14 6

Copper ores for sale at the Royal Hotel, Truro, on Thursday next. - Mines and parcels - Clifford Amalgamated 220 - South Caradon 514 - Great Wheel Busy 501 - Wheel Rose 405 - Phenix Mines 338 - North Trekerby 300 - West Caradon 271 - Powey Consols 200 - Bamfylde 155 - Boscawen 145 - St. Day United 143 - Gonsamers 211 - North Downs 40. - Total, 2686 tons.

Copper ores for sale on Thursday week, at Tyack's Hotel, Camborne. - Mines and parcels. - Clifford Amalgamated 870 - Wheel Baset 535 - West Wheel ston 523 - East Pool 245 - South Wheel Croft 906 - Wheel Bar 177 - Veig 139 - Tregon 114 - East Wheel Baset 96 - Wheel Palmer 87 - Elecroft 51 - Crane 25 - Condurow 22 - West Clifford 25 - South Wheel Baset 18 - Camborne Vein 10 - South Crinias 10. - Total, 3209 tons.

Copper ores for sale at Swansea, May 23 - Knockmash 61, 41, 67, 69, 73, 132 - Bershave 99, 54, 82, 77 - Genoa 54, 31, 1 - Var 10 - Camliss 13, 9 - Vutor 10 - Camliss 44, 50 - Italian Ore 12 - Sweepings 7 - Burnt ore 13, 97 - Australian ore 71, 4, 1 - Monson 45 - British Reunion 3 - Cops 11, 11 - Star 4 - Giron 1 - Cane 47. Total, 1443 tons.

## WATSON AND CUELL'S MINING CIRCULAR.

WATSON AND CUELL,  
MINING AGENTS, STOCK AND SHARE DEALERS, &c.,  
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Messrs. WATSON and CUELL having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past ten years, to the columns of the *Mining Journal*, their special reports and remarks upon Mines and Mining, and the state of the Share Market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. Watson, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium published in 1843 Mr. Watson was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. Watson and Cuell have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share-dealing than there is at present; and, from the lengthened experience of Messrs. Watson and Cuell, they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON and CUELL transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt, and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON and CUELL also inform their clients and the public, that they transact business in the public funds, railways, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON and CUELL are almost daily asked their opinion of particular mines, as well as to recommend mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a prospectus or fluctuating as mining.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are enabled to supply shares in all the best mines at close market prices, free of all charges for commission.

REDMOON.—Ever since this company was formed more than 3000 shares have been carried on by six gentlemen. Our advice to "one and all" is, do not sell. If, however, any prefer selling, we are buyers of any number of shares at the market price.

## THE MERRYBENT AND MIDDLETON TYAS MINING AND SMELTING COMPANY (LIMITED).

Incorporated under the Companies Act, 1862, which limits the liability of each shareholder to the amount of his shares.  
Capital, £100,000, in 10,000 shares of £10 each.  
Deposit, £1 per share on application, and £2 on allotment.  
First issue, 7500 shares, of which only 3000 shares remain to be subscribed for. No call will be made until at least six months after the date of allotment, with an interval of three months between each call, which will not exceed 10s. at any one time. It is not at present contemplated to call up more than £5 per share.

DIRECTORS.—  
JOSEPH BOYER, Esq., Barton Lodge, Darlington.  
LONSDALE BRADLEY, Esq., Eriar House, Richmond, Yorkshire.  
HENRY CURRIER BRIGGS, Esq., Outwood Hall, near Wakefield.  
JOHN HARRIS, Esq., C.E., Woodside, Darlington.  
BANKERS—Messrs. Backhouse and Co., Darlington.  
Messrs. Barclay, Bevan, and Co., London.  
SOLICITORS—Messrs. Robinson and Tomlin, 36, Jernyn-street, London, S.W.  
BROKERS—Messrs. Bower and Tomlin, 13, Cophall-court, London, E.C.  
MINE AGENT—Mr. John Cain.  
SECRETARY—Mr. S. Richardson.  
OFFICES—RICHMOND, YORKSHIRE.

ABRIDGED PROSPECTUS.  
This company is formed for the purpose of purchasing and working, on an extended scale, the Merrybent and Middleton Tyas Copper and Lead Mines, in the North Riding of the county of York, distant from the Richmond and Darlington Stations on the North-Eastern Railway six miles, and from the Catterick Bridge Station, on the same line, only four miles; and also, if found desirable, for erecting smelting-works on an advantageous site, which is now under the consideration of the directors.  
These mines embrace the minerals under an area of about 1200 acres in the parishes of Middleton Tyas and Melsay, Yorkshire; the freehold is 344 acres, of which the present proprietor has agreed to sell to the company as hereinafter mentioned, and the minerals under the remainder are held by the present lessees, under leases from the freeholders for 40 and 45 years respectively, at royalties of 1-10th and 1-12th respectively. The company will also be entitled to the benefit of back-leases for leases of the minerals on other adjoining estates.  
The Merrybent Mines were opened in February, 1863, and the ground explored in the adit levels to the depth only of 5 fms., and the veins have been found productive of copper and lead ore of excellent quality, and have, after paying all charges, realised a large profit on the capital embarked.  
The copper ore, which has up to the present time been merely passed through a drying-furnace as it comes from the mine, and not dressed so as to separate the ore from the accompanying vein-stuff, realised for the year ending 1864 an average price of £6 15s. 3d. per ton, whilst the cost of raising, drying, and making merchantable was 19s. per ton.  
The rate of railway carriage for conveying the ore from Catterick Bridge Station to the sale yards at Birkenhead is 15s. per ton.  
By acquiring the freehold of both the minerals and surface of so large a portion of the field, the company will possess a very valuable property, even independently of any mining operations.  
The Middleton Tyas Mines have not yet been tried under the present lease, but the lands leased to the company adjoin the old mines of Middleton Tyas, and through which the veins pass eastward from Merrybent.  
The mines of Middleton Tyas have not been worked for nearly 100 years; but judging from the extent of the old working and the large amount of slag (the ore having been smelted on the spot) they must have been exceedingly rich and productive.  
Ancient records prove the productiveness of even these shallow workings. Still greater results can no doubt be realised by unwatering the main ore-bearing beds of this district.  
The copper ore from the Merrybent Mines has been analysed by Dr. Percy, of the Royal School of Mines, London, who says:—  
"It consists essentially of a mixture of vitreous copper ore (dianhydride of copper) and carbonate of copper. It is evidently a very valuable ore. It contains—Metallic copper, per cent., 65.5; silver, per ton, 17 ozs. 2 dwts. 18 grs." The specimen analysed was selected as free as possible from the associated earthy matter.  
The property has been carefully examined and reported upon by two well-known mining agents in the North of England, who state:—"If the Merrybent Mines were properly developed, 100 miners may be employed; and judging from the ore which have been raised from the veins in the said ground, and their present appearance, coupled with the future prospects on extending the works both in length and depth, we are of opinion that rich and productive veins will be met with, and have no hesitation in recommending this undertaking as a promising and good investment."  
The terms of purchase are as follows:—  
For the freehold estate of Merrybent, containing 344 acres, upon which the mines and the company's works are situated, and for the dues and royalties arising from the minerals on the estate payable to the owner, the sum of £20,000, payable £10,000 down, and the remainder in twelve months, paying interest at 4 per cent. meantime. For the leasehold interest in the present leases 2500 paid-up shares of the company; and so confident are they of the success of the undertaking, that they have agreed not to receive any interest upon one-half of the amount of their paid-up shares until the shareholders have received a dividend upon their paid-up capital of £10 per cent. per annum.  
The leases are held upon very favourable terms, and with scarcely any liability for outlay or dead rent.  
No promotion money will be paid by the company.  
Application for shares to be made to the bankers, brokers, and at the offices of the company, Richmond, Yorkshire.  
No application for shares will be received after June 5, 1865.

FORM OF APPLICATION FOR SHARES.  
To the Directors of the Merrybent and Middleton Tyas Mining and Smelting Company (Limited).  
GENTLEMEN,—Having paid to your bankers the sum of £5, being a deposit of £1 per share on shares in the above company, I hereby request that you will allot me that number, and I agree to accept such shares, or any less number you may allot to me, subject to the conditions of the Articles of Association of the company; and I agree to pay the further deposit payable on allotment, and to sign the Articles of Association when required; and I authorise you to insert my name on the Register of Members for the number of shares allotted to me.  
Usual signature .....  
Name in full .....  
Date.....  
Address in full .....

SPECIAL NOTICE.  
CLERICAL, MEDICAL, AND GENERAL LIFE ASSURANCE SOCIETY.  
ESTABLISHED 1824.  
The EIGHTH BONUS will be DECLARED in JANUARY, 1867, and all with-profit policies in force on the 30th June, 1866, will participate.  
Assurances effected before June 30, 1865, will participate on two premiums, and thus receive a whole year's additional share of profits over later policies.  
Tables of rates, and forms of proposal, can be obtained from any of the society's agents, or of  
GEORGE CUTCLIFFE, Actuary and Secretary,  
35, St. James's-square, London, S.W.

## THE BRITISH MINING AND SMELTING COMPANY (LIMITED).

Capital £300,000, in 15,000 shares of £20 each.  
(With power to increase its capital by the issue of new shares).  
Incorporated under the Companies Act, 1862, with limited liability.  
Deposit on application, £3 per share, and a further sum of £3 per share on allotment.

DIRECTORS.—  
WILLIAM ALEXANDER THOMAS, Esq., Chairman of the Devonshire Great Consolidated Copper Mining Company.  
THOMAS MORRIS, Esq., Resident Director of the Devonshire Great Consolidated Copper Mining Company.  
JOHN THOMAS, Esq., Director of the Devonshire Great Consolidated Copper Mining Company.  
PHILIP EDWARD BLAKEWAY, Esq., Director of the Devonshire Great Consolidated Copper Mining Company.  
(With power to add three to their number).  
BANKERS—Messrs. Barnetts, Hoares, Hanbury, and Lloyd.  
CONSULTING MINE AGENT.  
Captain James Richardson, Principal Agent of the Devon Great Consols.  
SECRETARY—William Augustus Buckley, Esq.  
OFFICES,—No. 22, GREAT ST. HELEN'S, LONDON, E.C.

PROSPECTUS.  
The great improvement in the character of the lode at the 224 fm. level indicating the proximity of valuable deposits of ore, and the continuous splendid course of ore in the 118 fm. level on the south side, together with the promising lode lately discovered 130 fms. south of Hiltchins's shaft on the main lode of the Devonshire Great Consolidated Copper Mining Company, as well as the progressive development of ore ground in the lower levels at Hiltchins's Down, prove to a demonstration that ore exists both shallow and in depth in the Tavistock district, and only requires the judicious application of capital to secure its profitable development.  
It has been represented to the gentlemen principally interested in the Devon Great Consolidated Copper Mining Company that they would greatly promote legitimate mining if they would consent to become the directors of a powerful company, with adequate capital, whose object would be the purchase of mining sets, in Devon and Cornwall especially, which are languishing for the want of funds to continue operations with energy and perseverance; as also, if thought desirable, the establishment of smelting-works.  
These gentlemen, with an earnest desire to promote legitimate mining, have consented to assist in carrying out the objects proposed, provided a sufficient capital can be raised at the commencement—long experience having convinced them that the base of good mining is the necessity of repeated calls on an unprepared constituency, and they have concurred in the formation of the British Mining and Smelting Company (Limited) accordingly.

The sound commercial principles which have been so successfully adopted in the management of the Devon Great Consols Mines will be applied to every undertaking of this company.  
paid-up capital is proposed which it is thought will be sufficient to carry out the immediate objects of the company, unless some very desirable mining sets shall invite extended operations.  
No further call beyond the £5 per share before mentioned will be made without the sanction of a special meeting of the proprietors convened for that purpose.  
The surplus funds of the company will be lent out at interest or invested in first-class securities; and in order to keep alive the attention of proprietors from time to time to the progress of the company, a distribution of the available interest will be made annually, and the profits will be divided as they may accrue, and at such times as the directors may deem advisable.

The directors have already secured the purchase of the mining sets of Crowndale, on the east of the Devon Great Consols Mines, and of Wheal Bunny and River Tamar, and Wheal Williams on the west, with the plant and machinery thereon, for the sum of £10,000, and are in negotiation for two or three other sets in the same neighbourhood, which they believe will be sufficiently extensive for the present, and whereon operations may be commenced forthwith—the greater part of the machinery being already on the ground.  
The directors think it unnecessary to insert in this prospectus any mine agents' reports upon the value of the sets in question; suffice it to say, they have the unqualified approbation of Capt. James Richardson and many other mining agents, whose reports in extenso may be had on application at the company's offices, and the locality in which the sets are situated speaks for itself, the Devon Great Consols Mines alone having yielded a profit of one million sterling in 21 years.

The qualification for the office of director will be 100 shares: 200 shares each will be all that will be retained by the present directors, and the remaining shares will be allotted to the public in amounts not larger than 200 shares, nor smaller than 10 shares; the directors being persuaded that, in the interesting but somewhat speculative pursuit of mining, the shares ought to be distributed amongst a large number of individuals.  
The deposit of £2 per share having been duly paid to the bankers of the company, applications for shares must be addressed, in the form annexed, to Mr. W. A. BUCKLEY, the secretary, No. 22, Great St. Helen's, London, E.C.  
London, April, 1865.

FORM OF APPLICATION FOR SHARES.  
To be forwarded entire with the bankers' receipt to the secretary.  
To the Directors of the British Mining and Smelting Company (Limited).  
GENTLEMEN,—Having duly paid to Messrs. Barnetts, Hoares, Hanbury, and Lloyd, the sum of £2 per share, being the deposit of £2 per share on shares in the British Mining and Smelting Company (Limited), I request you will allot to me the said number of shares; and I hereby agree to accept the same, or any less number, subject to the several conditions set forth in the Articles of Association of the company.  
Name in full.....  
Address as it should appear.....  
On the Register of Members.....  
Quality.....  
Date.....  
Usual signature.....

THE WEST TRELAWNY MINING COMPANY (LIMITED).  
Registered under the Companies Act, 1862.  
Capital, £300,000, in 10,000 shares of £30 each; 10s. to be paid on application, and 10s. on allotment. Subsequent calls not to exceed 5s. per share.  
MANAGING DIRECTOR.  
Campbell M. Thomas, Esq., C.E. (of C. and C. Thomas, Redruth, Cornwall).  
SECRETARY—Mr. Charles Gibson.  
BANKERS—Manchester and County Bank, Manchester.  
INSPECTING AGENT—Capt. Elisha Harvey, Marazion, Cornwall.  
AUDITORS.

Richards Roberts, Esq. (late manager of the National Provincial Bank), Blandford.  
Messrs. Vaughan and Sprigg, accountants, Manchester.  
FINANCIAL AGENTS—Messrs. Harvey and Co., Clarence Chambers, Manchester.  
REGISTERED OFFICES.  
ALDINE CHAMBERS, PRINCESS STREET, MANCHESTER.

PROSPECTUS.  
This valuable mine is situated in the parish of Gwennap, Cornwall, on the northern declivity of Carn Marth Hill, a sister and adjoining hill to Carn Breu, on the northern side of which the celebrated Carn Breu Mines are situated, in one of the first mining districts in Cornwall, in a stratification productive of the greatest courses of ore in that celebrated county, in confirmation of which it is only necessary to quote the following statistics:—Carn Breu, Tinneroff, Cook's Kitchen, and Dolcoath have returned outputs of £200,000 profits; Wheal Buller and Bassett, Great South Tolgus, East Pool, Crofty, and South Roskear, £250,000; South Tolgus, North Pool, North Roskear, Selon, and West Selon Mines, £250,000. These mines are situated to the west. To the east are the Gwennap Mines, one of which (the United Mines) returned £2,000,000; Jewel Jewell, £450,000; Follis, £200,000; Wheal Clifford, celebrated for its hot lode and riches, and other productive mines. To the south, is Tresavean, which returned £154,422; Penstruthal, £130,000 in dividends. To the north, are North Downs, Wheal Rose, Harmany, Montague, and the Tolguses, which returned £250,000.  
The lodes of many of these extraordinary mines traverse West Trelawny. The successful development of this property is, therefore, a matter of apparent certainty from its analogy to its rich neighbours, it being merely a matter of sinking to the depth at which the riches in the other mines have been found to exist. The lodes have already been opened on superficially, and their general character, size, bearing, and appearance destroy any uncertainty as to this expectation. One lode in particular, which is from 4 to 5 feet wide, is of a most splendid character, containing large quantities of goossan, which experience has proved to be a reliable indication of rich deposits in depth.  
With such a situation as this mine possesses, being literally surrounded by mines of renowned wealth, it will be at once seen that the prospects of this company are free of the ordinary risk of mining enterprise; and its further development appears to be certain of similar discoveries, and of consequent profit to shareholders. It is in a state of infancy with regard to depth, being only 50 fms. from surface. This level can be continued eastward on the course of the lode in the right manner, which will also give a high range of backs, without the aid of machinery, to the depth of 70 fms. Two shafts are in good repair and available, and the operations can be carried on at a trifling expense. It is proposed to effectually develop the mine by sinking a shaft in the middle of the set, which will command the junction of two lodes; and as junctions of lodes are of the first importance in mining, leading to ores in vast quantities, the greatest expectation, according to universal experience, may be safely relied upon.  
The natural advantages of the property are highly favourable to inexpensive exploration, the water being drained to a great extent by surrounding mines, thus preventing the necessity of heavy and costly machinery.  
The property has been inspected by the following eminent practical men, whose opinions are unanimous as to the great value of the property, and its certain prospect of becoming a most lucrative undertaking:—Capt. Pope, manager of Wheal Bassett; Capt. H. James, inspecting agent for Messrs. Webb, Geach, and Pennington; Capt. Edwards, late manager of Wheal Kitty (St. Agnes); Capt. Webb, manager of the Cathedral Mine; Capt. Glasston, manager of the Cijah and Wentworth Mines.  
Subjoined are extracts from their reports. Detailed copies may be had on application.

EXTRACTS REFERRED TO.  
I have every reason to think that this property, if properly explored, will make a profitable and lasting mine. I recommend it with confidence to any gentlemen inclined to speculate in mining.  
Taking into consideration the number of lodes running through the property, and the surrounding mines having yielded such riches, I believe it to be a really good speculation, which on development will be found to richly remunerate the shareholders.  
Captain HENRY JAMES.  
I consider this property well worthy the attention of capitalists, as in all probability it will only require a moderate capital to bring it into a profitable state of working.  
Captain EDWARDS.  
In conclusion, I can most safely recommend the mine as an investment free from the ordinary risks of mining, and I am firmly convinced that whosoever works West Trelawny will be most amply rewarded for their outlay.  
Captain J. WEBB.  
After carefully regarding the surface of this property, with its character in the adit 50 fms. deep, I consider it a mining property of more than ordinary merit, the development of which I feel confident will prove a great success.  
Captain GLASSTON.

March 13, 1865.—A careful inspection of this mine, both underground and at surface, enables me to pronounce it to be a most splendid property. Having regard to its situation, being completely surrounded by the richest mines of our famous county, and to its own mineralogical features, the lode being of the same character precisely as its neighbours, I see no chance of its failing to become equally valuable. It will to me be strange and unaccountable if the mine does not prove exceedingly rich. If my judgment prove wrong, I shall consider my thirty years' experience of no avail in forming a conclusion.  
Applications for shares must be addressed to Messrs. HARVEY and Co., the financial agents to the company, Clarence Chambers, Manchester.

NOTICES TO CORRESPONDENTS.  
\* \* \* Much inconvenience having arisen in consequence of several of the Numbers of the past year, being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

PROTHRO AND OTHERS v. THE UNITED MERTHYR COLLIERY COMPANY.—Among other inaccuracies in your South Wales Correspondent's report of this case, in last week's Journal, is the addition of an "S" to the principal sum, thereby making £366,400, instead of £36,500. To prevent further injurious misconceptions, I beg leave to state that the judgment of the Court simply amounted to this company being compelled to pay the cash balance of purchase-money of certain 24 wagons, amounting to 1904s. 10d. in full. This company having already paid into Court 2000s. on account claimed to pay me, balance by yearly instalments to the Rolling Stock Company, as was provided by contract, and as was awarded by the valuers; or Prothro and others having settled with the Rolling Stock Company in anticipation, and having received a rebate of 1200s. that they should make a similar allowance to this company. This is the whole case, divested of technicalities, and the decision alluded to is so manifestly opposed to every principle of equity, that the United Merthyr Colliery Company have applied against it.—H. E. McLEOD, Managing Secretary.

ACADIAN IRON COMPANY.—Will some one kindly inform me if "the Acadia Channel Iron Company" is still carrying on its works at Nova Scotia? As a shareholder I get a notice of meeting at Sheffield; but as I cannot attend I never know what is going on, and no account of the proceedings of the meetings, which are annual, are reported in the Journal. I am told it is a valuable property, but it pays no dividend, and I do not act on my letters of enquiry always answered. Perhaps some one acquainted with the affairs of the company will answer the question, especially as it is left out of the Official List.—TENAK.

PAYING DIVIDEND ON PREFERENCE SHARES IN LIMITED LIABILITY COMPANIES.—THE BRITISH SLATE COMPANY (LIMITED).—I attended the meeting of this company, when the Chairman declared a dividend of 8 per cent. per annum on shares that had been recently issued, which he called Preference Shares. I, as an old shareholder, holding shares that had been fully paid up more than three years, very reasonably asked if I was to receive any dividend on the shares I held? When I was told by the Chairman that no dividend would be paid to the old shareholders, though their shares had been fully paid from three to four years. By a recent decision in Chancery, it has been held that to pay dividends to one class of shareholders and not to another is decidedly illegal, as the Limited Liability Act provides that all classes of shareholders are to be equal in the matter of dividends. Any proprietors of old shares in the company willing to join others in taking means to obtain an injunction from Chancery to restrain the directors from paying the 8 per cent. on the recently-issued Preference Shares, by the same through the Journal, will hear of others to join them to obtain the same junction.—AN OLD SHAREHOLDER.

METALLIFEROUS MINES BILL.—It is all very well for men to be enthusiastic in their condemnation of a measure which they deem objectionable; but when "A Miner" declares that an Act of Parliament providing simply that mines shall be properly ventilated, and that a more economic mode of raising and lowering the workmen will stop the greater portion of the 300 progressive mines now quoted in the Journal, I think it is going a little too far. Even assuming a man-engine to be ordered for the poorest mine (I admit that it is a very doubtful improvement upon ladders), what would be the result?—an extra expenditure of (say) 50s. per two months for a two-month, and as mines are now divided into from 1600 to 2000, and even 12,000 shares, the additional expense would only be from 1d. to 1s. per share, which would be quite unimportant. The bill, however, is now withdrawn, and mine agents should, therefore, exert themselves to so improve their mode of management as to leave no ground for an attempt to reintroduce it.—J. D. F.

GAS AND WATER COMPANIES' PLANT.—I am desirous of ascertaining the names and addresses of a few of the principal manufacturers of pipes and cocks to be employed in the conveyance of water, gas, and steam; they would be required of various dimensions, being for a large gas and water company.—L.

PETROLEUM AS A STEAM FUEL.—With reference to the generation of steam, Mr. W. Bridges Adams writes that in the application of heat to raise steam there can be no doubt that flame is the best method. We all know how rapidly a sheet of paper will boil water in a tea-kettle, and therefore it is that, whenever we can get petroleum cheap enough, and use it rightly, it will be the best. I am myself a creditor to some extent in this respect, and I have been able to produce 1 ton of good quality oil on the surface of equal thickness, a condition which cannot be attained till we get rid of the folded surface essential to rivetting.

EAST BROOKWOOD.—I thank Mr. Downey for his kind offer of an inspection of this mine, but which I think is scarcely useful on this occasion. He says I must have misread the reports that have been inserted from time to time; but if Mr. Downey will take the trouble to read them, he will see that I have not made any great mistake. I, therefore, call his attention to those dated Aug. 13, Nov. 19, and Dec. 10; he will then perceive that the only error made by me is in the value of the lode in the last, which should have been 1 ton to the fathom, instead of 2 tons. The agent, in his report of May 13, says:—"We have reached the north lode, producing only a few ounces of ore." Now, if this lode would produce 1 ton of good quality ore at a fathom at 10 ft. deep from surface, why did not the agent sink on its course, would leave a good profit to the company, instead of sinking from 5 to 6 fms., and now only occasionally producing stones of ore? This, as well as other points reported on, is of so unsatisfactory a nature as to require an explanation.—INQUIRER.

NORTH DOWNS.—It was stated some time since that a portion of this set-known as Peewee—could be disposed of for 30,000l. If this sum can now be obtained, would it not be much better to accept it, and thus save calls being made upon the shareholders?—A. B. C.

NORTH HAFOD.—Relying on your sense of propriety, I feel confident you will allow me space in the Journal for the following remarks, which are intended, if possible, to arouse the sleeping spirit of the Official Liquidator in this unfortunate concern. The affairs of the company have been in the hands of an Official Liquidator for nearly five years, for the purpose of winding-up, but no creditor in the locality of one (and there are several) has been paid one farthing. I am myself a creditor to some extent, and I can get no reply to any letter addressed to the Liquidator. But, Sir, the worst part of the matter is yet to come. While in London last week I was informed that the Liquidator has received considerable sums of money from some of the shareholders, who had refused to pay calls until compelled by the Court of Chancery, and those monies, I am advised, were sufficient, or thereabouts, to pay off all the debt owing by the company. If you will kindly insert this letter, it may, as I trust, lead to open the eyes of the Official Liquidator, to see the injustice of keeping traders and poor labourers out of their just claims for so long a time.—ROBERT WILLIAMS, late Agent of the Mine, Aberystwith, May 16.

HOW SOME SLATE QUARRIES ARE MANAGED.—Will "Pioneer" explain in which locality in North Wales is Dol-y-Clewin Quarry? Will any of your correspondents on this in this discussion point out the great evil of mismanagement—its cause and remedy? If not, I will endeavour to do so, and I shall prove that it is caused by the directors themselves.—1. Their want of quarrying knowledge.—2. Their love for relations.—3. By sending down to Wales what are termed local directors, &c.—SLATE SPLITTER.

LAGUNARO SULPHUR COMPANY.—Is it proposed to re-form this company; and, if so, will the present shareholders have any preference given to them?—NOTA.

QUEBRADA COMPANY.—The conflicting statements that are being published with reference to the position of the company's title to the property in Venezuela cannot fail to excite the gravest apprehensions among the shareholders. On the one hand, we are told that the company's title is based upon very doubtful grounds; and, on the other, that the solicitor of the company states that there is no truth whatever in the statement that the title is either doubtful or incomplete. Mr. Wright, in reply to a letter from Mr. Wyld (the late Chairman) must have been perfectly aware of this fact when he made the statement to the company, because Mr. Wyld himself, 18 months ago, at a general meeting, told the shareholders of the validity of the title, and since then Mr. Wyld has signed the minute unreservedly, accepting the title on the part of the company. With such contrary statements as these it is not surprising that the shareholders should be anxious to ascertain the real facts of the case; and, therefore, it is to be hoped that the explanations which the directors will afford at the meeting will be satisfactory.—A SHAREHOLDER.

PORT PHILLIP AND COLONIAL GOLD.—Can any reader explain the reason why this company did not pay any dividend last meeting; also, if there is any likelihood of their not paying any dividend for some time to come? I am informed that there has been no remittance sent over for some months, and that the reports show the yield of gold to be very small. Inad, I should be much obliged by anyone giving me what information they can. I am induced to solicit this, as from the fact of the shares keeping at a good price, I can only believe things are not so bad as represented, and that there must be some good prospects of future prosperity.—J. D.

CRENNYER AND WHEAL ABRAHAM MINE.—Would the secretary, or others connected with this mine, please state why the purser's reports do not now appear regularly in the Journal as formerly? As a shareholder, I am naturally anxious, and regret the something wrong.—SCOTIA.

NEW ROSEWARK.—As a shareholder in this mine, may I enquire how it is that in the circular just issued while sales of produce are entered up to May 11 of last year (the meeting) the labour cost and merchants' bills seem to be left from February? It appears to me that a better arrangement could be made, and one whereby the actual position of our finances might more clearly be ascertained. Certainly the ones that should be ascertained, if not actually paid, would be all that promptly-paid labour is of infinite more value than that obtained on credit.—SHAREHOLDER.

UTILIZATION OF SLACK.—"J. C." (Newport).—We are not aware that Mr. Rogers's invention for employing the slack for ventilating the colliery, and at the same time for drying coke, has been adopted anywhere except at his own colliery, near Leeds, but believe it was there highly successful. The invention, which was not patented, and was freely offered to any who would send Mr. Rogers word that they would adopt it, was, we believe, in placing coke ovens suitably arranged for burning slack in the place usually occupied by the ventilating furnace. The continuous ventilation was kept up by having several ovens, so that some would be going whilst others were being drawn and re-charged.

OKHAMPTON AS A MINING DISTRICT.—As you are always ready to publish anything relating to new mining districts, and a correspondent, signing "N. C. H.," has written many letters under this heading, in which he has endeavoured to represent the district as a first-class mining locality, I have had an opportunity of carefully inspecting the district, and find that there are four different or distinct channels of ground. The first, at the southern end, is the Dartmoor granite range, traversed by numerous tin lodes, bordering on the granite range is a narrow strip of highly-mineralized hills, traversed by strong and masterly lodes, of a very promising character, in the north of which the limestone measures, which is to be traced for many miles from east to west, are entirely cut off from the mineral ground; to the north of this, as in all the tin mining districts, there are certain lodes laid down by Nature to guide the miner in his daily researches; and as there are some small mines now at work in the north and south of the limestone measures, the writer not having fully ascertained the district to the readers of the Journal, it would be satisfactory if he would kindly undertake to show the true bearing of these rocks both to the north and south country. Will he kindly name each mine now at work both in the granite and limestone measures, as experience has taught me that the lodes ever so numerous, they will produce ore in paying quantities, in which he has taught me that the lodes ever so numerous, they will produce ore in paying quantities; they have been referred from Widdon down to Okhampton, and point of him whether the direct line will not be 20° or 30° to the north of west, as the limestone measures will be found to the south of Okhampton, the north side of the rock will be found to be barren and unproductive? If "N. C. H." continues his correspondence to the Journal it will be thankfully received.—PRACTICAL MINER: May 16.

**SHARE DEALING.**—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

**COAL FIELDS IN NEW ZEALAND.**—Some important experiments for ascertaining the value of the coal from the Kawakawa coal fields have been made on board Her Majesty's ships *Curacoa* and *Fisoon*, which were lying in the harbour, and Commodore Wiseman reported very favourably upon the quality of the coal. The report of the engineers, Messrs. K. J. Wemyss and T. S. Glasie, approved by Commander Parkin, states that they considered the coal below the average, having been much broken in the transit from the pit, and also saturated with water. The furnaces being arranged for burning the Australian coal, the engines were run for a run of two hours, to allow the fires to burn down, for the purpose of getting a fair addition of the steam, and to ascertain the proportion of ashes. The consumption was about 6 lbs. per indicated horse power, and for the first time since being on the Australian station they were able to maintain a pressure of 30 lbs. without the aid of blast, and the pressure was easily maintained, without forcing the fires, and with less labour to the fireman. The quantity of soot in the tubes was also much less than with the generality of Australian coal. Under these circumstances, they are of opinion that the coal is equal, if not superior, to the best of the New Zealand coal, and they are of opinion that the steamships of the generality of coal received on this station for the use of Her Majesty's ships, and before committing themselves to so positive an assertion, they recommend a further and more lengthened trial. Commodore Wiseman, alluding to the report, observes that there seems little doubt that, when the seam is properly worked, and the coal conveyed to steamships without being knocked about as this sample was, it will be found much superior to any coal yet found in the Australian colonies or New Zealand. He promises his assistants should a future and more lengthened trial be determined on, as recommended in the report.

LONDON, MAY 20, 1865.

Whether the occurrence of explosions in collieries can be altogether prevented by improvements in the system of working mines, or by any apparatus for preventing the ignition of the explosive gas when it exists, is a question upon which much difference of opinion is entertained, but it is certain that, at present at least, such explosions do frequently happen, and that the most we can do is to provide means of rescuing the men after an accident has occurred, in order that means of restoring them may be resorted to, instead of letting them perish through the delay which now occurs. The colliers are at present most praiseworthy in their efforts to rescue their comrades, notwithstanding the enormous risk attending the entering of an atmosphere of a highly poisonous character, and it cannot be doubted that if they be provided with a means of going into the foulest levels with impunity, the number of lives sacrificed would be materially lessened, and the colliers' occupation would be much less dreaded.

We have, during the past week, examined and experimented with the apparatus referred to in last week's Journal as invented by Mr. M. A. Galibert, the necessary appliances having been provided at the Royal Polytechnic by Prof. Pepper, for enabling those interested to ascertain, as far as experiments will enable them to do, the practical value of the invention. For this purpose, an air-tight box, about a yard square and two yards high, open at the bottom, was provided, so that a charge of tow and hay, chemically saturated, so as to give a thoroughly powerful and pungent smoke, could be readily burned beneath it, so as to fill it with the foul vapour. With the apparatus this mixture could be entered, and remained in for a lengthened period, the inventor asserting that the apparatus once filled is sufficient for half an hour, although we were certainly disinclined, upon the first trial, to extend the trial to that time. The apparatus is as simple as it is efficient, and consists simply of a sheep or goat's skin bag, put into communication, by means of two tubes, with a horn mouth-piece, which is made to fit between the lips when slightly opened. The nostrils are closed by a penny American letter clip, and the eyes are covered with a couple of watch-glasses, set in leather, so that the whole of the delicate parts of the head are thoroughly protected. The wearer is now ready to enter the gas, all that he has to do being alternately to apply his tongue to one or other of the orifices in the horn mouth-piece, according as he requires to inspire or respire. There are no valves or other complicated machinery of any kind, and the cost of the apparatus is very trifling. Mr. Galibert has received the highest testimonials from the Société de Hygiène de Paris, and from many other scientific societies, and others in France, relative to the invention, and it behoves all interested in the subject to take the opportunity of paying a visit to the Polytechnic to see the apparatus practically tested.

**PETROLEUM AS A STEAM FUEL.**—In some experiments made by Mr. C. J. Richardson, at Woolwich Dockyard, with his improved petroleum boiler, he has succeeded in evaporating 150 gallons of water with 14 gallons of petroleum. It appears that with the improvements he evaporises, on the average, at the rate of 12½ lbs. of water per one gallon of petroleum, and Mr. Richardson anticipates reaching 14 lbs. or 15 lbs. with the gallon of petroleum. For such early trials, he considers the results hitherto obtained are extremely satisfactory. The oil is under perfect control, there is no danger whatever, and the boiler is very easily worked.

**THE ABERRAMAN COMPANY.**—We understand the affairs of this company will, in the course of a few weeks, be again before the courts of law, to decide an action between Mr. Wickens, plaintiff, and Mr. Crawshaw Bailey, defendant, when it is expected some singular statements connected with the affairs of the Aberaman Company will be laid before the special jury for their decision. It appears the plaintiff has brought his action against the defendant for 150,000*l.*, or, in other words, the plaintiff claims a return of the 50,000*l.*, as part of the purchase-money deposited by the promoters as money received from the company; and also 100,000*l.* as damages. The plaintiff founds his action on the fact that he purchased the estate from Mr. Bailey for 250,000*l.*, and that he sold the estate and ironworks to the Aberaman company for 350,000*l.*; but in consequence of a deficiency being discovered in the acreage of the estate of some 400 acres, he could not complete his sale of the property to the company, and, therefore, claims the return of the deposit money, and the sum of 100,000*l.* for alleged damages. On the other hand, it is stated that Mr. Bailey sold the estate and works as they stood, without reference to acreage at all; and on the discovery being made that the estate was not so large as was generally understood in the district, he offered either to make an abatement in the purchase-money, or to return the 50,000*l.* deposit money, and so rescind the sale contract. The plaintiff rejected this, and claimed the damages before mentioned, and commenced the present action. Mr. Bailey, on the other hand, finding his terms refused, declares a forfeiture of the money deposited, in accordance with the terms of his agreement. And so the matter rests for the decision of a special jury.

**MINERAL PORTS.**—It is interesting to observe that the strength of the Customs' House establishment has been increased at Cardiff this year to 81, as compared with 50 in 1864, the total salaries and allowances to be paid being also increased to 6610*l.* this year, as compared with 6310*l.* in 1864. The Fowey establishment remains unaltered. At Glasgow the establishment is to be further carried to 122, as compared with 119 in 1864; and the pay and allowances for the current year will be 15,600*l.*, as compared with 15,280*l.* for 1864. At Hartlepool the Customs will have an establishment of 58 persons this year, as compared with 52 in 1864; the pay and allowances will be 6630*l.*, as compared with 6200*l.* in 1864. At Llanelli there will be no change. At Newcastle the establishment will be increased to 78, as compared with 72 in 1864; but the pay and allowances will be reduced to 9550*l.*, as compared with 9820*l.* in 1864. At Newport there are to be 27 persons employed in the Customs this year, as compared with 26 in 1864; pay and allowances 3170*l.*, against 3010*l.* in 1864. Shields will have no more officers, but the pay and allowances will be increased to 7510*l.* this year, as compared with 7360*l.* in 1864. At Stockton there is to be no increase in the number of officers, and the pay and allowances will be reduced to 1970*l.*, as compared with 2020*l.* in 1864. At Sunderland the number of officers on the Customs' establishment will be reduced to 61, as compared with 68 in 1864; the pay and allowances will also be reduced to 6890*l.*, as compared with 7130*l.* in 1864. At Swansea the number of officers will experience no variation; the pay and allowances will be reduced to 3620*l.*, as compared with 3710*l.* in 1864. At Whitehaven there will be no change either in numbers or pay. At

We have been favoured by Lord KINNAIRD with the following copy of his reply to the letter addressed to his lordship by Mr. KENDALL, published in the *Western Morning News*, and of which an abstract is given in the subjoined epitome of the proceedings at the meetings of those interested, held during the week, in connection with the proposed measure:—

DEAR MR. KENDALL,—Before I received your letter I had written to Mr. St. Aubyn, to say how much I regretted the antagonistic position to the Cornish Members which I have been compelled to take up by the resolution of Government. I came to at the eleventh hour to oppose the second reading of the Bill, introduced, as I stated, into the House on my own responsibility, but with the sanction of Sir George Grey—with whose conditions that the Bill should be widely circulated I fully complied by distributing upwards of 200 copies, and getting it inserted into local and other journals. You will remember that Sir George Grey, at the meeting at the Home Office, stated that he could give no reason for not introducing a Bill to this session, except that the Commission's opinion that delay was desirable. To this I could not agree, as I did not consider that the Bill would be of any use. Mr. St. Aubyn thought that I was against the sacrifice of life which the report proves to be the result of the present system of working the mines. Having been informed that there was to be a county meeting summoned to oppose my Bill, I determined to issue an address to the miners, as I felt that their opinion would not be ascertained by such a meeting, and that, as parties deeply interested, the miners should be made acquainted with the nature of the resolutions and the objects of the Bill. I do not see how I can with truth be accused of wishing to convey a false impression by giving the resolutions out of the report and the address, which I have written, as a promise by the Government to introduce a Bill which is written in my own name and signed by myself alone. I print the resolutions, because upon them my Bill was founded, and upon these resolutions and the recommendations is grounded the necessity for legislation.

I am surprised that you should say that I never permitted you to see the Bill, as I sent you and each of the Cornish Members a copy, and it was only when I had reason to believe that I should be obliged to introduce the bill on my own responsibility, that I sent you a copy of the Bill, and I am sure that you would have read it at the time, that you should not be in any way committed.

You ridicule the idea "of closing by lime and stone the thousand and one ends in the honeycombed mines, making up-cast and down-cast shafts." This is not my idea, but the deliberate opinion of practical and scientific men—men who have turned their attention to the subject, and who are acquainted with the working of mines both in this country and in foreign countries, and who have seen the results of the experiments I have just made, however much I may differ in this from your opinion and that of others in Cornwall, that mines, especially the deep mines of Cornwall, might be ventilated at a comparatively small expense, and thus save hundreds of valuable lives, which are sacrificed by the want of proper ventilation in the mines.

In the House of Lords, on Monday, Lord KINNARD, in reply to a statement that the Bill did not embody the resolutions of the Royal Commissioners, gave notice that on the following day he would move that the resolutions and recommendations of members of the Commission appointed to enquire into the condition of mines in Great Britain, to which the provisions of the Act of the 23d and 24th Vict., cap. 151, did not apply, be laid on the table in a formal debate from the report; but on Tuesday he said that, as he understood that Her Majesty's Government objected to the resolutions being so laid on the table to prevent his motion, and it might be convenient to their lordships if he were to state upon what grounds he did not wish to press it. He would take that opportunity of saying, with reference to what was reported to have taken place in the other House on a previous evening—namely, that the Home Secretary had stated the Bill did not embrace these resolutions, that he (Lord Kinnard) had received a letter from the right hon. baronet, in which he said he had not made that statement, and admitted that the Bill was founded on those resolutions.—Lord VIVIAN could assure the noble lord that the county in which he resided was strongly opposed to the Bill, and almost every portion of the county was ready to take the view to contest the Bill in the spirit in which the noble lord had promised to deal with it. He thought he might venture to say that, under such circumstances, legislation would be impracticable, and he appealed to the noble lord at least to postpone the Bill until Her Majesty's Government had had an opportunity of considering these resolutions.—Lord KINNARD could not agree with the noble lord, who must be misinformed in regard to the feeling upon his Bill. He had received letters from parties connected with mines, who assured him that all right-thinking mining agents and adventurers were in favour of legislation. He expected to receive a deputation shortly on the subject of some amendments; but, upon the whole, his measure had been received more favourably than he could have expected. He, therefore, could not agree to the proposal of the noble lord to postpone the Bill.—Earl GRANVILLE thought that the noble lord was not in a position to say that the Government were opposed to it. Had the noble lord not withdrawn his motion, he should certainly have supported the proposal of the noble lord (Vivian) to enable the Government to have further time for considering the subject.

At Liskeard, on May 13, a meeting of miners and others was held (Capt. Dunstan in the chair), for the purpose of considering the Bill, and to take such steps as might be deemed necessary in favour of the same. Amongst those present were—Capts. Trevillion, Richard Taylor, sen., J. Clymo, W. Taylor, jun., W. Rule, and Messrs. J. Dymond (Stoke), M. Loam, J. C. Isaac, R. Taylor, W. G. Nettle, J. Elliott, Z. Williams, A. Hingston, J. Cook, J. Kendall, R. Hockin, C. Jewell, R. Jewell, W. Geake, Mr. Methews (Essex), Sharpley, Pearson, Barnecutt, and Godfrey.—The CHAIRMAN remarked that the object of the meeting was merely to go through the items in the Bill, and to express an opinion on them.—Mr. T. WINTERS spoke in favour of the measure, and stated that he had been highly struck by the general rules in Clause 3, as to whether they would be likely to interfere with the due discharge of the works at the various mines, or whether they might be so far modified as to make them as easy to work as those observed at factories and coal mines. Now, with regard to the mortality, he had a report before him which showed that from and between certain ages the average life of the miners in Cornwall was far below that of the miners of other districts. He was certain that Lord Kinnaird did not desire the miners to be reduced to the same level as the population of the country, and he was sure that if the expense went, he remembered, and probably most of them would remember also arguments that were used when the first Factory Acts were brought into Parliament. It was thought that if they passed into law the mills would be shut up, that the trade would be conveyed over to America, Belgium, France, and other places, and that this country would be left in a dilapidated condition; but the fact was that that particular trade, and he might say it without exaggeration, had increased twenty or thirty fold. But it might be argued that that had nothing to do with the present case; but he was certain that if the Bill was passed, it would be a great deal more satisfactory result. Therefore, he thought they ought not to look for bad results from a measure of that description, if it could be framed in such a way as would give satisfaction to everybody connected with the mines.—Mr. RICH pointed out at considerable length the difficulties that would arise in carrying out the provisions of the Bill.—Mr. WINTERS said he understood that the other members of the Royal Commission did not disapprove of the principle of the Bill, but simply of the detail.—Mr. LOAM considered that Lord Kinnaird was not in a position to give a real opinion, and he thought that it was not his own responsibility, although taking the trouble to consult his fellow-commissioners was not only an insult to those gentlemen, but to that county, and he hoped they would pass a resolution which would negate the whole proceedings of the Bill. After some considerable discussion, Capt. CLYMO moved "That the meeting having heard the exposition of Mr. Winters relative to Lord Kinnaird's Bill, now before the House of Lords and the discussion thereon by practical miners present, believes that the passing of the said Bill would be ill adapted and very injurious to the mining interests of that county, and that the meeting, therefore, when put to a vote, when a large number of miners arose from their seats and left the room. Some hands, however, were held up in favour of it, and the proposition was declared to be carried.

An influential meeting, for the purpose of expressing disapproval of the Bill, was held at Camborne, on Monday (Dr. G. SMITH in the chair), and amongst those present were—Messrs. C. Fox, P. P. Smith, J. Roberts A. Wiliams, J. Rule, E. H. Rodd, E. Burgess, R. C. Hawke, Hill, H. Tiley, J. H. Budge, R. H. Pike, T. Trevithick, Teague, Chas. Thomas, J. Have, S. Higge, S. H. James, R. Grylls, P. Clymo, W. Pike, J. P. Tyack, J. Pauli, W. Harvey Husband, R. Hilderley, Thos. Angove, J. Thompson, M. G. Pearce, T. Pool, J. Vivian, W. Thomas, W. C. Tyack, W. Hutchance, Alf Jenkins, Cork, Boy, J. L. Dyer, J. Dawkins, W. Jones, W. J. Gwynne, W. B. Williams, W. Yewens Vyanan, H. V. Newson, J. R. Daniel, Rubiny, J. Daw, Cardozo, J. Rowe, W. Howe, and E. Cook. The CHAIRMAN said that if there were clausen in the Bill injurious to the mining interest, they should express their opinions at once respecting them. He felt some alarm at the idea of subjecting their mining operations to the dictation of the Board of Trade—the members of which Board, by-the-by, were not always the best informed upon the subjects with which they had to deal. Although there might be many of the members well acquainted with what was going on, yet it was ways carried out as engineering in a purely economical manner, and what did any of the members of that honourable committee know about the economy of their Cornish mines? How felt great jealousy in being thus placed under the supervision of that Board; for if they appealed from men of forty or fifty years' experience, who had been trained not only in the school of theory but also of practice, to men who were ill-informed in practical matters, he feared that the worst consequences must result. The handbill that had been recently addressed to the miners, signed "Kinnaird," and written in such a bad manner, and calling upon them to rise and shake off their shackles—he had read with great pain. He hardly knew what was the meaning of the Bill, but if it were that class was set against

and that the miners were oppressed against ground down by the proprietors and adventurers, he protested against it. He did not believe there was any class where the employer and employed worked together more amicably than in the mines of Cornwall. It was perfectly sure that such a handbill was uncalculated for, and he was afraid, would do some harm. He did not get into the merits or the classes of the bill, but if it were worse than it was, or that it was better, it must be taken into consideration. Mr. HILL complained that a comparison had been insinuated between coal mines and metal mines—there was no analogy. In coal beds the supply seemed almost inexhaustible, but in working metalliferous deposits there was great uncertainty and risk. He thought that if the Bill passed, the high and mighty Board in London would be frequently sending down some young gentlemen to tell their old and tried captains how to work Dolcoath, or that they did not know much about Carn Brea. He believed that if the Bill were carried out, it would be the means of putting a stop to many of the mines, which even now, without being culled upon for a large outlay in erecting a man-engine or the like, could not work at a profit. The speaker read letters from Mr. P. Rogers, Mr. H. Bates, M.P., Mr. St. Aubyn, M.P., Mr. Kendall, M.P., Mr. J. J. Rogers, M.P., and Messrs. J. Taylor and Sons, all containing expressions opposed to the practice of the bill.—Capt. J. VIVIAN considered the Bill would prove ruinous to two-thirds of the mines.—Captain CHARLES THOMAS said the board of management should be in Cornwall and not in London, and should consist of practical men, who thoroughly understand mining matters.—The CHAIRMAN read the petition that had been drawn up, which stated in effect that the Bill would be injurious to the mining interest, without benefiting the working miner, and contained many things that were impracticable in the working of metalliferous mines, and that it would make of his year's improvement a year's loss, and increase the loss of the miner, and they thought the bill should not be allowed to pass.—Mr. R. H. GUYLL, on the authority of Mr. Robert Hunt, contradicted the statement that had been made that he (Mr. Hunt) had had anything to do with the passing of the Bill.—Mr. W. PIKE read a letter from Lord Kinnaird, in which it was suggested that a deputation should wait on his lordship, to amend the Bill where necessary, and expressing a belief that the Bill would work beneficially.—Mr. GUYLL said at present the miner occupied such a position in the labour market as to be in demand, and, therefore, the best persons who could complain of any defect in a mine would be the proprietors. If any place were unhealthy or unsafe, it was found that miners would not work there, and they were always kept in such a condition as to secure the services of the best workmen. If a man-engine was placed to a mine, it was for the pecuniary advantage of the adventurer, though the miner got the physical advantage.—Mr. CHARLES FOX stated that the use of a man-engine was a saving of a third in labour, eight men with one could compete with twelve without. In Westphalia man-engines were being introduced for nearly all mines beyond a certain depth. In speaking of forming a local board it should be remembered that the matter referred to England and Wales, and not to Cornwall alone. The Commission had stated that there was a higher rate of pulmonary consumption amongst miners than in any other class. He thought the Commission desired that they were always kept in such a condition as to secure the services of the best workmen. If legislation were needed in the matter, the Bill should spring from practical men, but at present they did wisely in rejecting the whole Bill.—Mr. HOBERTS considered the Bill was impracticable, and that mining speculations were of a most uncertain character, and often involved an immense outlay.—Mr. A. FOX said that the proposed supervision did not go so far as to order a captain how to drive an adit or sink a shaft, or interfere with the management of the mine, any more than the Factory Bill with the factories of the North of England.—Mr. JENKIN said that it would be well to give the miners small change on pay-days, to save them the necessity of going to a public-house to get it, and that if the miners were supplied with a good basin of soup or cap of coffee for the believed much disease resulted through the sudden changes from heat to cold, and not taking food at the time.

A meeting in favour of the Bill was held at St. Cleer, on Monday evening. Mr. WINTERS did not ask the miners to subscribe to the details of the Bill, but to consider whether it would not be better that some amendment should be made to remove the evils which had been proved to exist, and thereby improve the health and condition of the miners.—The Rev. J. BEKELLE remarked that he had now been upwards of 30 years in Cornwall, and from the time he came there down to the present day he had longed for some legislation on that subject to be initiated. Let the result of that attempt of Lord Kinnaird be what it might, he was satisfied that his lordship was entitled to the deepest gratitude of every miner in Cornwall and Devon. All acknowledged that it was necessary that something should be done, and he would not be testifying with might and main to the management of a mine in the presence of the agents who conducted it. Now Mr. Thorne considered that the workmen were the best judges when to send their children underground, but they were sent to work at a tender age, simply because wages were low, and they could accomplish work which men ought to do. He hoped that some such legislation as was proposed would be carried into effect.—Mr. FARNALL said the present Bill was brought into Parliament to benefit the labouring classes in mines, which were highly destructive to health, and increased the rate of mortality to a considerable degree. At those mines there were rules for the protection of the capitalists, but none for the miner himself. Lord Kinnaird's Bill provided entirely for the protection of the labourers, and that was what he wanted. He was in favour of the capitalists, but at the sight of such men growing old, and they would do so much more if they had to be his burden. There was no room for modification in the proposed rules, and they had no wish to have the Bill passed in its present state.

An important meeting, presided over by Capt. PETER CLYMO, was held at Liskeard on Wednesday, for the purpose of considering the Bill. Messrs. Deeble, Boger, R. Childs, R. Foster, J. Raby, R. Raby, T. Kittow, J. G. Dymond, A. Bazely, C. Childs, J. Eliot, K. Taylor, Gard, Holyoake, Polkinhorne, Goombe, Symons (Hatt), Jinkin, Thorne, Isaac, Taylor, Thomas Milton, Capts. Seacombe, J. B. Clymo, Rich, Taylor, Dunstan, Pascoe, Cook, Harpur, Andrews, Dally; and the Rev. J. Glencross being amongst those present. The Chairman condemned the Bill as impracticable. He remarked that the Bill stated that an adequate amount of ventilation should at all times exist or be produced in every mine, so as to render the air therein pure and harmless. Now, that was a matter of impossibility, and could not be accomplished; but so far as they could improve the air it was done. He was in favour of maintaining the mine, and of sending miners up and down, he was sure that those who had got the management of the mines would be very glad indeed to have a man-engine where they had got a shaft they could appropriate to that purpose, whilst the sinking of a special shaft takes ten years, and was enormously expensive; he hoped after awhile to be able to appropriate one. It would be most dangerous to draw the men in skips, and wherever the men were raised and lowered by mechanical means it must be by the man-engine, which was the best and safest plan that could be adopted. They had one at Devon Great Consols, and he saw they were erecting another.—Mr. FOSTER moved, and Mr. KITTOW seconded, "That this meeting views with great alarm the Bill which has been introduced into the House of Lords for the purpose of maintaining the mine, and considers that many of its provisions are not only inapplicable to such mines, but likely to prove seriously injurious to all the interests concerned."—Mr. BOGER read and moved, and Mr. R. W. CHILDS seconded, a petition against the Bill, and it was agreed that when signed it should be forwarded to the Lord-Lieutenant for presentation.—Mr. C. CHILDS said he could hardly conceive anything more injurious for giving practical effect to the resolutions which the Commission had agreed to than the Bill introduced into the House of Lords by Lord Kinnaird. It seemed that the whole of the mining operations were to be carried out under the supervision of the Board of Trade, and if such a measure became law it would be utterly impossible to prevent mining as an adventure in any part of the country. The Bill would affect the working of the Bill would be very seriously injurious to the capitalist, but also to the working mine. The proceedings terminated with a vote of thanks to Capts. Clymo and Seacombe for calling the meeting.

In a letter addressed by Mr. N. Kendall, M.P., to Lord Kinnaird, with reference to his "impracticable and mischievous Bill," he says that it was clearly laid down by the Commission that compulsory mechanical raising and lowering was only applicable to new mines, and that "as to ventilation, we decided that it would require immense consideration before legislation could be attempted. True, you persisted in the idea of closing by 'lime and stone' the thousand and one ends in our honey-combed mines, making upcast and downcast shafts, the idea of which we ridiculed; and it is too bad, in your address to the miners, to attempt to make them believe that these are the Cornish Members who were on the Mining Commission. The Bill which you now propose is a direct answer to the question, the introduction of which they protested, and which, when they did see, they unanimously condemned, and this you well knew before you addressed the Cornish miners. I have no time to see Mr. Davey and Mr. St. Aubyn, but I think they will feel quite as strongly as I do when they see your address."

Referring to the statement of Capt. William Teague, that Lord Kinnaid's Bill, if passed into law, would shut up more than "two-thirds of the mines now at work," Mr. Thomas Winters (of Camborne) says that Capt. Teague has not pointed out any particular clause that will have the effect proposed, but simply made a broad assertion unsupported by facts. He quotes Lord Kinnaid as saying, "If a Bill will not do that which is so forth it is quite right that it should be amended; and Captain Teague, "and those with whom he acts, will be conferring a great service by assisting in the correction of any errors it may contain. The principle of the Bill, it is admitted, is right. There is no dispute but that grievances exist, and ought to be remedied, not only for the sake of the poor miner, but also for the sake of the country, and the fact is, as he says, that the Royal Commissioners, and upon which they have unanimously passed resolutions in condemnation, is to admit the indisposition of the mine-owners to deal with the question, but to leave the ill-ventilated mines as they were, the inconveniences unchecked, the young children uncared for, and all the anomalies existing without correction and without redress." Another Correspondent, whilst opposed to the Bill in its present form, says that it is a measure that improves the lot of the miners and that many, if not all, of our miners, the deep impression of many persons as well as Lord Kinnaid, and is a well-known fact. Let any impartial man look at our deep mine underground, and he will come to the conclusion that if the physical strength of a miner is spent in climbing from 180 to 300 fms. over steep ladders, it cannot be applied in boring and blasting the rock, and it is probable that climbing the ladders from deep mines is one of the causes of the physical weakness of the miners when they come to the surface. Therefore, some means should be applied to raise the miners to surface when their day's work is completed."

**MINING IN CANADA.**—In the introductory remarks to an admirable catalogue of the minerals recently exhibited at Sherbrooke, Mr. C. Robb, M.E., of Montreal, remarks that it is highly gratifying to observe that the mining interest continues to attract unabated attention, notwithstanding the general stagnation of business throughout the province. Apart from the ascertained facts, and the success that has actually attended many of these adventures, the circumstances of their vigorous prosecution for in many years after the first untold excitement commenced in 1849, Canada affords reasonable grounds to infer their permanence and importance. He expresses regret that both Canadian and English capitalists have manifested hitherto so little disposition to embark extensively in enterprises at once so promising as investments, and so conducive to the best interests of the province. The province is mainly indebted to the capitalists of the United States, with their characteristic energy, for having invested largely in purchasing and in the working of mines in Canada. The only extraordinary speculation in the copper market in the United

States have induced a spirit of reckless speculation, unfavourable to the true mining interests of Canada, and it is extremely desirable that all attempts at the system of organizing mining companies should be amended, so as to include the element of real merit in the location selected. Some highly interesting districts, as Acton, Leeds, Sutton, &c., were not represented at the Exhibition, but the Sherbrooke, Harrington, South Ham Mines, the Melbourne and Shipton Slate Quarries, and other properties contributed, so that, as Mr. Robb remarks, enough was shown to convince the most sceptical of the extensive distribution and importance of the Canadian mines.

#### REPORT FROM NORTHUMBERLAND AND DURHAM.

MAY 18.—The coal and other trades continue brisk, with the prospect of an excellent summer trade. The coasting and export coal trade from the district during April has been extremely good. The total exports of coals having been 402,531 tons, against 373,211 tons in April last year, showing an increase of 29,320 tons. The coasting trade, also, has been prosperous at Newcastle, but has fallen off at some of the other ports. The total quantities being 422,780 tons, against 474,754 tons in April last, a considerable falling off in the aggregate.

Some of the engines to be worked by the Tyne Coal Company have been contracted for, including two powerful pumping-engines, the cylinders of which are to be 106 in. in diameter. Tenders are also required for twelve high-pressure boilers of large size, being part of the plant required for the above company at Wallsend. The pumping operations here will be on a scale never before attempted on the Tyne, and the result of the drainage of the famous High Main Seam will be most advantageous to the whole district. A boiler explosion occurred at the Seghill Colliery on Sunday week. The explosion was very violent, and caused great damage; but as it occurred at two o'clock in the morning, when the men were not at work, it was happily, unattended by loss of life. The walls of the winding engine-house were blown down, the beam and other parts of the machine broken, and several wagons and trucks broken to fragments. This will be off work some time, but the John Pit still, in the mean time, be worked double shift. The brakeman left the engine two hours before the explosion, the cause of which is unknown.

The annual meeting of the delegates from the several branches of the Northumberland and Durham Miners' Relief Fund was held in Newcastle, on Saturday. There was a large attendance, Mr. Brender, of Hworth, being in the chair. On the whole, the society has been successful, but does not advance so rapidly as might be expected. The number of members remains about the same as at the end of the last year, although there have been great fluctuations during the year. During the past year about 1000 members had left the society, and the same number had joined. Twenty-seven members had fallen victims to accidents in mines, nine of whom had left widows, and three had left dependent kinsmen. The total number of children becoming chargeable to the fund during the past year was 17, and 18 persons received permanent relief; making a total of 35 widows, 3 dependent relatives, 41 children, and 18 permanently disabled members now receiving allowances from the society. The financial position of the society may be considered encouraging. The receipts for the year have been as follows:—1864, £4,745, and expenditure £2521, 18s. 10d., which shows that the society has saved during the past year the sum of £1224, 6s. 5d., and the total sum in hand is £2100, 6s. 5d. The total cost of the management has been £183, 12s. 4d. It was proposed to alter the scale of payments in cases of permanent disablement as follows:—For twelve months, 8s. per week; for the next six months, 6s. per week, and for the remaining term of disablement, 4s. per week. But ultimately this change was not approved, and the former scale of charges is to be adhered to. It is to be regretted that the men do not, as a body, support this fund, as that appears to be the reason given for the owners not coming forward in force to support it.

#### REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

MAY 18.—There is a steady demand for manufactured iron, and the works, as a rule, are pretty well employed. A few orders come from the United States, and an anxious glance is being cast to that country, to see whether the increased demand from the restoration of the dilapidated railways and general stock of the Southern States will not lead to considerable orders for iron and hardware. The accounts generally indicate that President Johnson is favourable to free-trade principles; and, as the interests of the revenue will demand a large import trade, there are good grounds for hoping that when the Southern States are again represented in the Senate a modification of the present high duties will take place. The Hardware Trades continue dull. There is no serious scarcity of orders, except in one or two branches, but the orders are generally of small amount.

The North Staffordshire Strike is now, it is said, finally over. Despite the promise on the part of the Brierley Hill executive of considerable aid for South Staffordshire, there has been a steady increase of puddlers at work; and at a meeting of the Puddlers' Union, on Wednesday evening, it was agreed that the men should return to work, with the condition that "they were reinstated in their former position at the works." Whether this condition is likely to create any difficulty remains to be seen. It is pretty certain that the masters will not discharge any men who may have gone to their work whilst the rest were absent on strike. On the whole, the North Staffordshire strike was one of the most ill-advised which has taken place for some time. The bricklayers of Wolverhampton are on strike for an advance of wages, and other concessions. One of the first acts they did was to give notice to the foremen that they must not go near the works; and, as the men's Unions now wield a power which is almost despotic, they were obeyed. On Tuesday the masters invited their foremen to meet and confer with them, on which the committee of the Union forbade it, notifying such to the masters, unless two men from each lodge were present. This certainly looks like stretching authority to the utmost pitch. Masters are not to be allowed to speak with their confidential foremen! If the executives were wise they would condemn proceedings such as these, which must be condemned by everyone whose judgment is not warped by passion. How the whole body of men yield to the decision of a few is a phenomenon well worth studying. That wages are rising is a gratifying fact. It is unfortunate that this advance is attained at a cost so great as almost, if not entirely, to neutralise itself.

The firms in this district seem determined to maintain their position as manufacturers of high-class machinery; it is found, moreover, that the more reliable the quality the better the sale, irrespective of the larger cost which that quality entails as compared with machinery and castings in which low price, and not the first quality, is mostly desired. Messrs. J. Perry and Sons, of Highfield, near Bolton, have some enormous armour-plate machinery, as well as some for rolling the largest section of angle and T iron for shipbuilding; large steel plate and rail-rolling mills, &c. Another South Staffordshire firm has received a continental Government order for a large armour-plate mill, and almost 18 months since the Gossens Foundry sent a train of eight rolls, 31 in. diameter and 10½ tons weight each, to the Marley Works. Mr. John Brown, of Sheffield, was supplied with the largest rolls on record by Messrs. J. B. Johnson, of Wolverhampton, and Messrs. Cammell's armour-plate rolls were obtained from Swan Village.

#### REPORT FROM DERBYSHIRE, YORKSHIRE, AND LANCASHIRE.

MAY 18.—The Iron Trade is beginning to assume a more settled aspect, and the reports of the various iron-producing districts are, on the whole, more satisfactory. The best brands of manufactured iron command full rates, and orders are reported to be plentiful. In second-class makes the rates are not so firm, and a slight reduction in the quotations of quarter-day has to be conceded. In pigs there is a good trade doing, and prices are already firm. In the Middlebrook district the market is quiet, and much improvement is not anticipated until the close of next month.

The Coal Trade remains in pretty much the same position as last reported; with the exception that the continued openness of the weather seems to have a little effect in diminishing the general demand. The manufacturing trades of Lancashire are improving, and the consumption of coal in that district is much greater than of late. The course which events have taken in America will tend to stimulate the varied trades in Lancashire, so that the consumption of coal will necessarily be on the increase. The woollen trades of Yorkshire are also reported active, which will have a similar effect as regards the demand for coal. The collieries now in course of formation are making rapid progress, and, as each is provided with a convenient railway exit for the minerals, they will add much during the present year to our regular production. A new company has been formed in the Wingfield district for the purpose of winning a large acreage of coals, and they only await the adjustment of terms with some of the mineral owners before commencing extensive operations. The Shirland Colliery is now actively pushing forward the sinking, and we shall ere long have to note their getting to the coal. The branch railway from the main line of the Midland to the pit's mouth is about completed, under the contract with Mr. R. Pocklington, of Sheepbridge, Derbyshire. This branch will be exclusively used for the conveyance of the minerals from the colliery to the main line of the Midland. The new colliery of the Clay Cross Company, at Morton, is being developed with as much rapidity as is consistent with safety. The company are sinking to the black shale bed of coal, which they hope to touch in about two months. The engines and plant have been constructed with every attention to modern improvement; and this colliery, when at work, will be one of the most productive in the company's possession. Employment will be afforded to a large body of workmen; and, as it is hardly possible by the time anticipated when the colliery will be completed to provide a workman's train for the conveyance of labour between Clay Cross and the colliery, The Tapton Coal, Coke, and Iron Company are not lacking energy in the erection of the necessary plant for their collieries, and in the neighbourhood of Chesterfield it is considered that they are proceeding on a sound and firm basis. The plant is substantial, and, with the driftway which is being made, it is argued that the ventilation will be so very materially benefited that the mines will be worked more advantageously than heretofore.

After a long period of hope and expectation, the Mill Dam Mining Company directors have declared a dividend of 5s. per share, which will absorb 750l. It is payable on June 1, and will truly be a real boon to the shareholders. The dividend has been earned from the profits of the last quarter's working, and the directors report the mine to be doing well. We have always had a favourable opinion of this undertaking, and there is no doubt that, had it not been for the terribly expensive law proceedings, the 2000l. which in law would have shown respectable dividends. Let us hope the worst is past, and the future full of promise.

At the Eyam Mining Company annual meeting of shareholders, held on Wednesday, at Sheffield, Mr. T. J. Parker, in the chair, there was a good attendance of shareholders, and the report and the financial statement were adopted. The report of

the captain of the mine was also considered satisfactory, and adopted unanimously. The committee of management and other officers were re-elected, and there were the usual votes of thanks for past services. The discussion consequent upon the proceedings showed the prospects of the mine to be very good. The financial statement represented the sale of ore as having realised 3550l. 11s.

On Wednesday the forge engine and rolling-mills just completed at Messrs. W. Whitwell and Co.'s Thornaby Ironworks, at Stockton, were set to work amidst much rejoicing. The blast-furnaces were erected about three years since, and now that the rolling-mills and puddling-furnaces are added the works may be expected to become well-known in the market. The works stand on about seven acres of ground. Lines of rails connect them with the Darlington section of the North-Eastern on the south side, while on the opposite side there is the River Tees, which actually forms the northern boundary; indeed, the works may be said to be built "on" the river. There are twenty puddling-furnaces and two mills, which will afford employment to about 200 men. The description of iron produced will be bars, light rails, and angle iron. The machinery is of the most complete description, and comprises all the latest improvements. Mrs. W. Whitwell started the forge-engine; the manager, Mr. Adams, rolled the first bar; and Mrs. Garney Pease set the large mill-engine in motion. After a complete merchant bar had been produced, the company period of refreshments in one of the offices.

The applications for Letters Patent include—Mr. G. Peel, Jun. (Peel, Williams, and Peel), of the Sobo Foundry, and Isaac Mason, Sale, for hydraulic presses for compressing cotton and other substances; Mr. Edward Richardson, Ravensthorpe, Mirdfield, for means and apparatus for producing or effecting fog-signals; Messrs. John Hurl and Henry Tonge, Sowerby-bridge, near Halifax, for an apparatus for grinding corn, seeds, minerals, or any other substance ground on the flat surface of a stone; Mr. J. Hesford, Canille-street Works, Bolton, for machinery for stretching cotton and other fabrics or materials; and Mr. S. T. Garrett, Stoke-on-Trent, for stoppers and flasks, bottles, and other similar vessels.

#### REPORT FROM MONMOUTH AND SOUTH WALES.

MAY 18.—A slight change has come over the Iron Trade since my last report, which has arisen mainly through the uncertainty as to the future course of things in the States. The latest advices are not considered favourable to a durable and satisfactory peace, and it is feared that the expected revival in trade will not take place for a much longer time than at first anticipated. There are still a good many enquiries made on American account, although the actual engagements entered into have only been a few in number. The Eastern markets are taking a considerable quantity of railway iron, and about the usual quantity of puddled iron is sent to Staffordshire. The specifications in hand at present are principally for rails for South America, India, Russia, Sweden, and other continental states. There is no change to report in quotations. There is a fair enquiry for coke plates at the advanced prices, while charcoal command about the usual sale. The Coal Trade is, as it were, stationary. Steam coal merchants report that the requirements of foreign buyers are decreasing, and that many are driven to the North of England markets, in consequence of the high prices which are asked by the colliery proprietors. The shipment of Welsh coal at Birkenhead is increasing, and this, perhaps, partially accounts for the slight falling off in the exports from the local ports, more especially Cardiff. The house coal collieries are in average employ, and quotations are maintained.

The Mining Association of Great Britain meeting, in last week's Journal, has been much commented upon here. The unworthy reflection cast by the meeting upon the South Wales coal masters is considered most unjust, and, if I mistake not, will be resented. It is manifestly unfair (I am informed) to state that our proprietors "had benefited from the protective action of the Association almost more than any other district," and decidedly wrong to assert that they are unwilling to pay any just claim upon them. In what respect have they benefited, it is asked, and I cannot reply. The Bute Dock bills have not been withdrawn, as announced last week, but the Trustees have decided to take them before the general committee, despite the rather unfavourable report of the referees on some points.

A singular case came before the Swansea magistrates on Monday. Mr. Doggett, the contractor for the conversion of the Oystermouth tramway into a railway, was summoned for damaging the turnpike-road, and lessening the breadth of the same, by laying down rails or tram-plates. Mr. Tripp appeared in support of the information, and Mr. Simons for the defendant. A bill for authorising the conversion was promoted in the present session by Mr. Dickson and others, but it was rejected. The works, however, have been commenced, and it was held that as the landed proprietors offered no objection the promoters had a perfect right to go on. Mr. Tripp asked for an adjournment, which was opposed by Mr. Simons, who maintained that the magistrates had no jurisdiction. It was ultimately agreed that the case should be adjourned until Saturday week, in order that Col. Wortham, the general superintendent of the turnpike-roads of South Wales, should be communicated with.

THE COLLIERIES EXPLOSION NEAR DOWLAIS.—It is satisfactory to report that no death has as yet resulted from the late explosion at Vochriw Pit, the property of the Dowlais Company, and the statement in last week's report, that one life had been lost, turns out to be incorrect. All the sufferers are progressing as favourably as might be expected. It is now clearly ascertained that the workman who attempted to clear the gas out of his stall had the top of his lamp off at the time, and there can be no doubt that this reckless and suicidal act caused the explosion.

THE ABERMAM IRON COMPANY (LIMITED).—The shareholders in this company are likely to have to wait a long time for the return of their calls, as there is every probability that a protracted and costly litigation will take place between the parties concerned. Mr. Crawshaw Bailey sold the property to a Mr. Wickens, solicitor, for 250,000l., of which 50,000l. has been paid, and his title-deeds represented that it was 1530 acres. Mr. Wickens disposed of the property to the Abermam Iron Company (Limited) for 350,000l., and the directors of the latter, in the course of their investigations, discovered that the acreage was 430 acres less than represented. In consequence of this discovery, they gave notice to cancel the purchase, and demanded the return of the money paid, as well as damages for the expense incurred in promoting the company. Mr. Wickens, in his turn, had to make similar demands on the company, and the latter offered to return the 50,000l. paid, provided a guarantee was given that no further claim would be made upon him. This guarantee was refused, and Mr. Crawshaw Bailey, as might be naturally expected, declined to repay the 50,000l. until he had the undertaking asked for. Here matters stand at present, and there is no doubt that costly litigation may be safely looked forward to, and it must be admitted that the directors of the new company have at last taken the only feasible course open to them for reimbursing themselves for the enormous expenses incurred. The works continue in the hands of Mr. Bailey.

SUCCESSFUL WINNING OF COAL IN THE LLYNFI VALLEY.—We are informed that the parties who have been engaged in sinking the Troedryhiw Pit, in the Llynfi Valley, have at length been successful in striking and intersecting the "Big Bettws Vein," and that the coal appears to be of the usual thickness, and of excellent quality. The proprietors of this colliery have been persevering for a length of time, notwithstanding every discouragement, in their efforts to reach the coal, and the above result is especially gratifying to themselves and to their mineral adviser, Mr. David Llewellyn, F.G.S., &c., of Glyn Neath and Pontypool, whose energy and confidence in the success of the undertaking (arising from a practical knowledge of the district) has alone prevented the enterprise from being prematurely abandoned. This circumstance affords a striking example of the value of practical knowledge and experience in the winning and working of coal mines; as in this case, we are given to understand, one of the most eminent theoretical mining engineers in the district had pronounced an opinion adverse to the success of the undertaking.

#### NEW INVENTIONS.

PROVISIONAL PROTECTION for six months has been granted for the following:—O. E. EVANS, Birmingham.—Improvements in digging machinery. April 22. R. A. BRIDGMAN, Fleet-street, London.—Improvements in smoke-consuming furnaces. April 25. [ing and melting iron and other metals. April 27. W. BALE, Emmerberg, Hanover.—Improvements in furnaces used for smelting. D. SAMPSON, Aldridge, Lancashire.—Improvements in furnaces. April 27. J. BERNARD, Lincoln's Inn-fields, London.—Improvements in apparatus for raising water and other fluids, and in raising and lowering such apparatus. April 28. J. BERNARD, Lincoln's Inn-fields, London.—Improvements in boring or excavating and blasting rocks and minerals, and in the treatment of tools employed therein. April 28. H. BESSEMER, Queen-street-place, London.—Improvements in the manufacture of pig-iron or foundry metals, and in making and treating castings of such metal. May 1. LETTERS PATENT have been issued for the following:—J. ELLIS, Middlebrook-on-Tees, York.—Improvements in furnaces used in the manufacture and the heating and melting of iron, which improvements are also applicable to other furnaces. Dec. 16.

LIST OF SPECIFICATIONS recently published:—Machinery for breaking stones, 104; treating slags to obtain cast-steel, 4d.

L. DE FONTAINEMOREAU.

EFFICIENT RAILWAY BRAKE.—The necessity of a brake which, in cases of absolute necessity at least, shall be capable of instant application, was especially manifest in the case of the collision which occurred on Monday on the South-Western Railway, the cause of which was the turning of a passenger train on to the wrong line of rails, so that it came in contact with a goods train. It is obvious that in such a case as this the only means by which the catastrophe could have been prevented was by placing in the hands of those in charge of the train a brake which would bring them to a dead stand in the distance between the points where the junction rails join the two lines. There are but few brakes by which such a feat could be accomplished at all, and with most of these the remedy would be worse than the disease, owing to the fearful concussion which would result; in the case, however, of Mr. Boulet's brake, to which reference has several times been made in the Mining Journal, the train could be stopped in the given distance without the slightest injury to the passengers, the power of the train itself being employed to effect the stoppage, and the force being applied very gradually, although with extreme rapidity. As the cost of the brake complete is but about 5l., there can be no excuse on the ground of expense to the introduction of the invention.

COATING SHIPS' BOTTOMS.—We understand that Mr. W. Austin, C.E., is successfully introducing a coating composition for preventing rust, weeds, barnacles, &c., on iron ships' bottoms. The composition has been too

roughly proved by use on Trinity Light ships for nearly two years, and Mr. Austin has received the surveyor's testimonial of its great efficiency. He has just received his Admiralty order, to coat the *Sea Mew* gunboat, in competition with French's composition laid on red lead, and is very confident of his success, being certain that red lead destroys instead of preserving iron, by eating it into pits.

UTILISING BESSEMER SLAGS.—Mr. S. FOX, of Deepcar, near Sheffield, proposes to crush the slag to powder, wash out the impurities, and re-trust the remainder with a fresh charge of metal.

NOVEL INVENTIONS.—Patents have been obtained in France for an instrument to indicate the existence of minerals or springs of water in land;—for raising a ship into the air, and steering it there;—for applying steam to children's toys;—for heating and lighting apartments with the same apparatus;—for mode of lifting letters in envelopes with silk;—and for a case which you can put in your pocket and transform into a seat at will.

INVENTION IN RAILWAY CARRIAGE TRANSPORT.—Mr. John Routledge, carriage department manager of the West Hartlepool Harbour and Railway, has recently effected an improvement in railway passenger traffic, in rounding extreme curves in the railway line itself, that cannot fail to prove highly useful and beneficial to the travelling public, inasmuch as some of the immediate results of the improvement will be to insure perfect safety, with long carriages, at a high rate of conveyance, and of preventing wear and tear to the carriages. The improvement consists in the use of a special kind of carriage, which is scientifically known as the curve of the tyre and the side of the rail. By the adoption of Mr. Routledge's invention fully 25 per cent. of the friction now endured will be removed, and there will be at the same time obtained an acceleration of speed equal to between 25 and 30 per cent. over ordinary carriages with the same amount of steam power. It consists in a principle of action, well illustrated in the construction of a carriage containing two first-class and four second-class compartments, 57 ft. (say) in length, and about an inch and a half broader than ordinary carriages. There are three pairs of wheels, the centre ones performing the radiating process, and the end ones, connected with the centre by rods, are made to the requirements of the case, no matter how great the curve may be. The invention was tested a short time since by Mr. W. S. Long, the West Hartlepool Harbour and Railway manager, on the curve near Hartlepool station, and found to be a complete success.—*Stockton and Hartlepool Mercury*.

#### FOREIGN MINING AND METALLURGY.

In connection with the iron trade of Belgium a somewhat singular circumstance is noticed—considerable importations of English pig. During the first quarter of this year these importations have even exceeded the exports of pig. This shows the concentration which is continually produced in Belgian metallurgical industry. Pig is now worked upon the spot, all the metallurgical groups, rolling-mills, construction workshops, &c., being established by the side of blast-furnaces. This is the tendency of Belgian metallurgy, and the exports must necessarily be less and less considerable. The situation of affairs is tolerably satisfactory, some important orders having, it is understood, been received from England and Germany. Prices are firm, but without change; activity is maintained without difficulty in most of the works. Plates are placed with a little slowness. A Chartered letter says:—Some contractors have been concluded this week with England. The Couillet Company has concluded one for 1000 tons of rails, and two others, of nearly the same importance, referring to plates and merchant iron. The Châtelineau Company, and that of Montigny-sur-Sambre, have also received orders, one from England, the others from the North, principally from Russia. The contract of 1000 tons of rails, concluded in England by the Couillet Company, has been accepted without any guarantee of durability. The rolling-works, which carry on operations principally for the interior, have been less favoured of late, business showing a little slowness. On the whole, the market for iron and rails, although relatively satisfactory, does not display the sustained activity which it would be desirable to see in it. The market for pig displays more regularity; prices maintain themselves fairly, and the production is easily run off. Business in coal in Belgium is active, deliveries are important, and prices are sustained with great firmness, some descriptions showing an advance upon November or December of about 1s. 8d. per ton. The easy outlet of Belgium coal at the period of the year at which we have now arrived has excited some comment. If it had been provoked by the rigour of the season would it, it is asked, still continue? On the contrary, it would have ceased with the frost, and stocks would have accumulated. It would seem as if the industrial consumption of France, after having made trials of all kinds of coal, has been led to the conclusion that the employment of Belgian coal, after all, attended with the most advantageous results. This seems to be the cause of the more favourable position in which Belgian coal mining industry finds itself in respect to sale. We say "in respect to sale" because, although the sale of Belgian coal is not so easy, the extraction is difficult, in consequence of the exigencies of workmen and the scarcity of labour. These difficulties which extraction meets with must necessarily influence the price of coal. Some of the Belgian coalworkers begin to forward their products regularly by sea.

Two transactions in charcoal-made pig have been concluded at St. Dizier, at some improvement upon previous rates. Quotations of iron remain without variation. The forges of the Moselle are inactive; much difficulty is experienced in keeping works employed, and sacrifices of all kinds have been made so as not to allow them to come to a standstill. Nevertheless, in this thoroughly industrial part of France, everything indicates life and movement; minerals are being worked, canals are being completed, works are being improved, and searches for coal are being continued. The first-fusion foundries show a tolerable activity—a state of things which is explained by the low prices at which these works sell. Their fabrication is not equal to that of Champagne, but their cheapness becomes a quality. Heavy articles such as the industrial consumption of France, after having made trials of all kinds of coal, has been led to the conclusion that the employment of Belgian coal, after all, attended with the most advantageous results. This seems to be the cause of the more favourable position in which Belgian coal mining industry finds itself in respect to sale. We say "in respect to sale" because, although the sale of Belgian coal is not so easy, the extraction is difficult, in consequence of the exigencies of workmen and the scarcity of labour. These difficulties which extraction meets with must necessarily influence the price of coal. Some of the Belgian coalworkers begin to forward their products regularly by sea.

At Havre the price of Lake Superior copper has been somewhat revived by the sale of about 34 tons, of which 8½ tons Minnesota was sent in 1864, and the remainder, Quincy, at 90l. 10s. per ton; the last-named mark is now held at 98l. per ton, in consequence of the complete absence of Minnesota at Havre. Arrivals at Havre have been almost nil. Chilian has obtained a fresh advance, thanks to the maintenance of firmness in England, and the slow but continuous reduction of stocks in Europe. The affairs noted in April show a total of 512 tons, of which 250 tons were disposable, and sold at 84l. to 86l. per ton, while the balance, undeliverable made 85l. to 86l. per ton; the disposable was taken by the consumption of the deliverable on speculative account. The recent grain events with which we are so busy in the United States have kept speculation in the iron price, so that there remain sellers to deliver at 86l. per ton, without purchasers. As regards disposable, there is a general adherence to 86l. per ton. As regards minerals, there have been few transactions or arrivals at Havre. Of old copper and miscellaneous copper the receipts have been small—5479 ingots of English and 8 tons of old. The stock of copper at Havre April 30 was made up as follows:—United States, 106 tons; Chilian bars and ingots, 8950 tons; miscellaneous, 250 tons; and copper from various sources, 200 tons; making a total of 10606 tons, or of pure copper about 4300 tons, against 4650 tons on March 31. There has been but little movement on the various German "places," and notwithstanding the little activity in the demand the article is sustained firmly in value. Stettin and Cologne have remained without variation. On the Amsterdam market Drontheim is held at 69 ½ sh. The Amsterdam and Rotterdam tin markets have displayed rather a better tone. At Paris business has been quiet at the prices of the preceding week. Although not much demand, the article is more firmly held at Hamburg; at Berlin it has slightly given way; at Stettin prices have been nominal. Lead remains without activity at Paris, and prices are unaltered. At Havre purchases make default, and the article displays a downward tendency; the importations during the past month have been 14,106 tons, and Rotterdam the demand for consumption has slightly revived, and there is more enquiry for Stettin, at 10½ sh. The article maintains the same position at Hamburg; there is not much animation in the demand, but prices are firmer, especially as regards soft German lead; some small supplies of Spanish, Rein and Co.'s mark, have recently been received. At Berlin several lots of some importance have been dealt in for exportation, with deliveries in June and July; prices have remained without change; some small quantities have been sold at Cologne for consumption.

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We have once more to report progress in connection with the celebrated Vieille Montagne Zinc Mines and Foundries Company. The directors feared twelve months since that the exercise of 1864 would be troubled by the Danish war, and especially by the complications which that event might bring about in the relations of the European powers with each other. Happily, however, these rather gloomy anticipations were not realised. The Dano-German war, as proved a short affair, and caused no perturbation in the general peace of Europe. At the same time it lasted sufficiently long to check deliveries of zinc from Upper Silesia, and enabled foreign speculation to affect for the better the selling price of the company's metal. This intervention of speculation enabled the price of zinc to be maintained in the satisfactory point during the whole of last year. The company thus found in their increased profits which it obtained from sales a compensation for the diminution in their general total, as well as a certain elevation in the cost of production. A dividend of 16s. per tenth share can thus be distributed for 1864. The total production of the company's metallic mines amounted last year in zinc to 147,000 tons, making a total of 147,000 tons, while the total of the collieries was 89,810 tons, making a total of 147,000 tons. This total was exactly equal to that attained for 1863. A new centre of working in the principal mine of Moresnet was completed towards the close of last year—that is, some months sooner than could have been anticipated but for the efficacious assistance of perforations by compressed air. The bearings of calamines were reached at a depth of 300 feet, a level below the new centre of working. The directors are now making an

Months.	1865	1864	1863
January, 1865	1039	1039	1039
February, 1865	1039	1039	1039
March, 1865	1039	1039	1039
Total	3097	3097	3097
Average for 1865	1032	1032	1032
Average for 1864	2183	2183	2183

There was thus a decrease of 1151 tons per month in the average receipts of iron, and of 409 tons per month in the average receipts of pig or castings.

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examination of the metalliferous bearing at this depth. They are in ignorance of its extent and strength, in consequence of the slowness with which bearings can be examined in compact calamine, very hard, and presenting great difficulties also in consequence of the undulation of the rock in which they are enclosed. It is anticipated that it will require at least a year to complete the examination of this bearing at 300 feet, which will be necessary to enable a decision to be arrived at as to the ulterior works which will be necessary to undertake in order to create a new working at a lower level. The directors will endeavour to press forward as much as possible the creation of this new shaft, as the preliminary works of mines are always slow and difficult to execute in such a position, and as the enormous mass of earth containing calamine which had accumulated on the company's concessions, and which for twenty years have furnished it with an abundant supply of materials at low rates, are coming to an end, and will soon entirely disappear, they will be replaced by a production nearly equal to that of Swedish blonde mineral, giving a metal of excellent quality, but at a much less cost of production than the calamine of Moresnet. We must take an early opportunity of examining other phases of the company's affairs.

**GEOLOGICAL SOCIETY OF LONDON.**—May 10: Mr. W. J. Hamilton (President) in the chair. Abolom Bennett, Marazion, Cornwall; Joseph Brown, Q.C., of the Middle Temple, 54, Avenue-road, Regent's-park, N.W.; the Rev. John Manners, M.A., incumbent of St. Thomas's, Brampton, Cheshire; and George Noakes, 2, Grosvenor-villas, St. Bartholomew-row, Holway, were elected Fellows. The following communications were read:—  
1.—"On the Azoic and Palaeozoic Rocks of Southern New Brunswick," by G. F. Mat-  
thew, communicated by Dr. J. W. Dawson, F.R.S., F.G.S.  
2.—"Results of Geological Observations in Baden and Franconia," by Dr. F. Sand-  
berger, Foreign Correspondent G.S.; communicated by the President.  
3.—"On the Changes rendered necessary in the Geological Map of South Africa, by  
recent discoveries of fossils," by Dr. R. N. Harbridge, F.G.S.  
The following specimens were exhibited:—A collection of Devonian fossils from South  
Africa, exhibited by Dr. R. N. Harbridge, F.G.S. Specimens of lead and copper from Corn-  
wall, Devon, and the following papers will be read:—1. "Additional Observations on  
the Raised Beach of Sangatte, with reference to the date of the English Channel, and the  
presence of Loess in the Cliff section," by Joseph Prestwich, F.R.S., Treas. G.S.—2. "On  
the Superficial Deposits of the Valley of the Medway, with remarks on the Denudation  
of the Weald," by C. Le Neve Foster, B.A., F.G.S., and William Topley, F.G.S.

**GREAT NORTH LAXEY.**—It will be observed that the report received this week is again very important, and fully strengthens the anticipations held out last week. At the bottom of the shaft the lode is 3 ft. wide, with a rib of lead, and every appearance of standing off in a rich lode in the 70, which is shortly to be commenced. It must be borne in mind that the shaft has been sunk for 15 fms. on a lode valued at from 1 to 2 tons of lead per fm. The 60 south is still worth 1 ton per fm., and the winze below the 50 is worth 1/2 ton per fm. There is every ap-  
pearance that this mine will shortly open up a very profitable concern, and valuable  
discoveries seem on the eve of taking place. It is also likely that this highly desirable  
result will be arrived at with the large credit balance the company has now got.

**TRURO MINING MARKET.**—The unsettled state of American affairs is not without its depressing influence, both in the Metal and Mining Markets. A much  
better feeling, however, prevails among all parties connected with the mining interests  
than there has for the last three or four years. The standard for copper ore is firm, and  
the price of tin is expected to advance. There have been several important discoveries  
in some of the mines during the last few weeks, among which we notice Wheal Buller;  
two or three months since these mines were freely offered at 5s. per share, they are  
now about 60s. Badnick Consols was abandoned about three years ago, and was at once  
taken up and set to work by a gentleman, where (although tin has been so very  
low) they have since paid some hundreds in dividends. During the last fortnight a  
splendid lode in tin has been met with on a new lode, whole throughout the sets, and  
only about 6 fathoms from surface. It is right to remark here that this is parallel to  
the great courses of tin wrought on by the old adventurers, where the lodes were valued  
at 500s. per fathom. A cross-cut is being driven in the adit level (35 fathoms deep) to  
intersect this lode, and they expect to cut it in two or three weeks. Wheal Jane is  
interesting well. The meeting of the adventurers was held on the mine a few days since.  
The agents reported highly on the prospects of the mine, and stated they had from 40  
to 50 tons of tin at surface. West Chiverton meeting was held yesterday at the accom-  
paniment of the mine, when a dividend of 20s. per share was declared, and the mine never  
looked better. Wheal Busy has greatly improved; also Killefith, with several others,  
have gone up in price. The prices are:—Great Busy, 5s. 5s. to 5l. 10s.; Wheal Buller,  
60l.; Killefith, 7l. to 8l.; Wheal Jane, 11l. to 12l.; Palmouth and Sperris, 1l.; North  
Chiverton, 4s. to 5s.; Badnick Consols, 46s. to 50s.; West Jane, 8s.; Wheal Hope,  
3s.; North Shepherds, 7s. to 8l.; Wheal Sparrow, 4l. to 4l. 10s.; Wheal Rose, 50s.  
to 57l.; North Rooker, 14l. 10s.; North Jane, 18s.; West Chiverton, 65l. to 67l.;  
Silver Rose, 12s. 6d.; Clifford, 29l. 10s. to 30l.

At the (French) Credit Mobilier meeting, at Paris (Mr. Isaac Péreire  
in the chair), a highly favourable report was presented, the profits on the year's work-  
ing raised the amount standing to the credit of profit and loss, after payment of divi-  
dend, to 7,868,207 1/2 frs. The bankers' balance on Dec. 31 was 39,387,653 frs. A divi-  
dend of 50 francs for the year was agreed to, and Messrs. Isaac Péreire, Charles Mallet,  
and Griesinger, the retiring directors, were re-elected. It is remarked in the report  
that, "fortunately, it is not on the income of a single year that ought to be appreciated  
the kind of services which an establishment like this can render; they can only be  
judged of from results obtained through a series of years, and those results are shown of  
an average revenue of 18 1/2 per cent. on the capital of our shares since our company was  
established." The first dividend was unfortunately for the company, but the Ottoman loan  
of 50 millions was more fortunate, and the Ottoman Bank is prosper-  
ous, 16 per cent. dividend having been announced. As to the unification of the home  
debt of Turkey, and a concomitant loan of 4,000,000 Turkish liras, the Credit Mobilier  
declined to take any part in it. The Italian Credit Mobilier, the Austrian and the South  
of France Railways, the Spanish Credit Mobilier, the Madrid and the Paris Gas Com-  
panies, the Transatlantic Maritime Company, the Paris Gas Company, the Compagnie  
des Entrepreneurs, and the Compagnie Immobilière are all described as being in a prosper-  
ous position; but the Société Nérlandaise de Commerce and d'Industrie and the North  
of Spain Railways are unsatisfactory.

**DECLARING DIVIDENDS OTHERWISE THAN OUT OF THE PROFITS.**—Four  
of the late directors of the Franklin Gold Mining Company, Durham Lead, have been  
summoned to trial, at Ballarat, on a charge of conspiring to defraud. Bail allowed  
in one surety of 50l. or two of 25l.—*Dick's (Melbourne) Mining Record.*

**CORNISH PUMPING ENGINES.**—The number of pumping engines re-  
ported for March is 36. They have consumed 3048 tons of coal, and lifted  
232 million tons of water 10 fms. high. The average duty of the whole is,  
therefore, 51,400,000 lbs. lifted 1 ft. high, by the consumption of 112 lbs.  
of coal. The following engines have exceeded the average duty:—  
Chiverton-Cookney's 60 in. .... Millions 29.9  
Cargill Mills-Mitchell's 72 in. .... 63.0  
Carn Brea-76 in. .... 66.2  
Cook's Kitchen-50 in. .... 57.6  
Great Wheal Busy-Harvey's 85 in. .... 56.6  
Great Wheal-Leds-60 in. .... 66.6  
New Rose-Phillips's 85 in. .... 55.8  
North Wheal Crofty-Trevanion's 80 in. .... 55.4  
South Wheal Frances-Marriott's 75 in. .... 62.1  
Treloweth-60 in. .... 62.3  
West Wheal Seton-Harvey's 85 in. .... 57.9  
Wheal Margery-Wesley's 45 in. .... 51.6  
Wheal Seton-Tilly's 70 in. .... 68.3  
Wheal Tremayne-Mitchell's 60 in. .... 54.4

**THE SLATE TRADE—ITS STATE AND PROSPECTS.**—The highly satis-  
factory position of the SLATE TRADE—the demand being so much greater  
than the supply—renders all information respecting it of general interest.  
Some three years since a descriptive pamphlet was issued by Mr. T. C.  
Smith, of which two editions of 5000 each were speedily disposed of; this  
has now been re-printed, with much original matter from practical authori-  
ties in the several districts, and particulars of most of the quarries at  
work, explanatory of their state and prospects. The new work is pub-  
lished at 1s. each, and can be had at our office.

**TO INVESTORS.**—In consequence of the death of the proprietor,  
the FOLLOWING SHARES are FOR SALE, at GREATLY REDUCED  
PRICES. Particulars on application to Mr. J. Newcombe, 35, Cumberland-street, Pim-  
lico, S.W.:—  
63 Public Works (London and Paris) ..... £363 1/4 ..... —  
10 East India Col-  
lery Agency ..... 50 (all) ..... 35  
20 Gwance Wood ..... 70 ..... 35  
6 Haver Silver-Ld. 25 1/4 ..... 7  
5 Crown & Wen. 8 (all) ..... 5  
\* Has paid a dividend, and is about to declare another.  
† Working profitably.

**MR. WALTER TREGELLAS, 3, CROWN COURT,**  
THREADENEE STREET, LONDON, E.C., continues to deal at close  
market prices in all good sound dividend and progressive mines.  
MR. TREGELLAS has BUSINESS in any number of Santa Barbara and North Slope  
rocks.

**ROBERT LIBBY AND SON, MINE SHAREDEALERS, &c.,**  
CAMBORNE, CORNWALL.  
Can at once recommend the following mines for good and sound investment, and must  
be long having a great rise:—  
Rosewater United. Trannock.  
Crown. New Lovell.  
S.B.—Parties wishing information as to either one of the above mines can obtain it  
by applying to R. Libby and Son.

**MESSRS. SAMUEL AND JOSEPH RICHARDS, having**  
ESTABLISHED AGENCY OFFICES AT TAVISTOCK, are PREPARED TO  
undertake the MANAGEMENT and PURCHASE OF MINES, to MAKE IN-  
formation relative to their power to those who may be desirous of obtaining in-  
formation relative to the investment of capital in mining.  
Dated Abbey Mead, Tavistock.

**ELFORD, WILLIAMS, AND CO.,**  
COPPER ORE WHARFINGERS,  
METAL AND GENERAL COMMISSION AGENTS,  
SWANSEA.

**In Chancery.**  
**PURSUANT** to an Order of the High Court of Chancery, made in a  
Cause WILLIAM HENRY FORMAN, plaintiff, against WILLIAM HARVEY  
and others, defendants, ALL PERSONS CLAIMING to have ANY INTEREST IN THE  
ADVENTURE IN the plaintiff's bill, called WHEEL ANNA MINE (and formerly called  
Wheal Friendship Mine), situate in the Parish of St. Hilary, in the County of Cornwall,  
are, by their solicitors, on or before the 23rd day of June, 1865, to COME IN and PROVE  
THEIR CLAIMS at the chambers of the Vice-Chancellor, Sir John Stuart, No. 12, Old-  
square, Lincoln's Inn, Middlesex, or in default thereof they will be peremptorily ex-  
cluded from the benefit of the said order. Friday, the 23rd day of June, 1865, at One  
o'clock in the afternoon, at the said chambers, is appointed for hearing and adjudi-  
cating upon the claims.  
ALFRED HALL, Chief Clerk.  
OLIVERSON, LAIRE, and PEACHEY, 8, Frederick's-  
place, Old Jewry, London, plaintiff's solicitors.

**India Office.**  
**BY ORDER OF THE SECRETARY OF STATE FOR INDIA**  
IN COUNCIL, notice is hereby given that the DIRECTOR-GENERAL OF  
STORES FOR INDIA will be READY, on or before Monday, the 23rd day of May inst.,  
1865, to RECEIVE PROPOSALS in writing, sealed up, from such persons as may be  
willing to supply—  
**BRITISH IRON.**  
And that the conditions of the said contract may be had on application at the India Store  
Office, Cannon-row, Westminster, where the proposals are to be left any time before Two  
o'clock P.M. of the said 23rd day of May, 1865, after which hour no tender will be re-  
ceived.  
Gerald C. Talbot, Director-General.  
India Office, May 8, 1865.

**Sale of Scotch Pig-Iron.**  
**SALE OF THIRTY-SEVEN THOUSAND TONS OF SCOTCH**  
PIG IRON, on Wednesday, 7th June next, at Two o'clock, at 23, West George-  
street, Glasgow. There will be offered FOR SALE, BY AUCTION, the FOLLOW-  
ING LOTS OF PIG IRON:—  
About 10,000 tons No. 1 Eglinton, L.O.B. at Ardrossan.  
" 15,000 " 3 ditto ditto  
" 500 " 1 Blair ditto  
" 500 " 3 ditto ditto  
" 1000 " 1 Muirkirk\* ditto  
" 4000 " 3 ditto\* ditto  
" 1000 " 1 Dalmeilington ditto  
" 1500 " 4 ditto ditto  
" 2000 " 4 ditto ditto  
" 500 " 1 Portland, at Runcorn, Fleetwood, & Morecambe.  
" 1000 " 3 ditto ditto  
37,000 tons.  
\* The " Muirkirk " can be delivered f.o.b. Glasgow or to foundries on the south side  
of the river for 1s. per ton extra.  
Tenders or sales—Cash, within ten days, against satisfactory delivery orders for the  
iron. If desired by purchasers, advances to the extent of 45s. per ton will be made on  
security of the iron for any period up to six months, on moderate terms.  
Consumers wishing to make trials of any of the brands can be promptly supplied by  
applying through their usual brokers.  
McEWEN, BRYSON, AND CO.

**SOUTH-EASTERN RAILWAY.**  
The Directors of the SOUTH-EASTERN RAILWAY COMPANY are open to  
RECEIVE TENDERS for the PURCHASE of the undermentioned OLD MATERIALS:  
CLASS I.—RAILS, TIES, CAST AND WROUGHT SCRAP IRON, STEEL, &c.  
CLASS II.—BRASS LOCOMOTIVE TUBES, GRASS, TARPAILINGS, WASTE,  
&c.—Forms of tender, with terms and conditions of sale, may be had on application to  
MR. BARNES, storekeeper, 5, St. Thomas-street, S.E.  
Tenders to be sent in to the Secretary, on or before Tuesday, the 30th inst.  
London Bridge Terminus, S.E., May 18, 1865.  
S. SMILES, Secretary.

**JOHN ABBOT AND COMPANY (LIMITED).**—WANTED, a  
GENERAL MANAGER, for the works and businesses of this company, situate  
at Gatheshead-upon-Tyne. The works and businesses carried on consist of rolling mill,  
forges, chain and anchor manufacturing, iron and brass founding in all their branches,  
and engine and boiler building, &c.  
Such manager must possess a thorough and practical knowledge of both the commer-  
cial and manufacturing departments in all the branches of the above businesses, and  
whose character will in every respect bear the strictest investigation. A liberal salary  
will be given.  
Applications in writing, stating age, and present and previous employment, must be  
addressed to the Directors of the above company, and sent under cover to Joseph  
ANDERSON, Esq., solicitor, Westgate-street, Newcastle-upon-Tyne, on or before the 16th  
day of June next.—May 18, 1865.

**THE NORWEGIAN CHARCOAL IRON COMPANY**  
(LIMITED).—The Directors REQUIRE IMMEDIATELY a MANAGER for  
their MINES and IRONWORKS, near Eidsa and Kongsberg, in Norway. He must  
be fully competent to undertake the direction of the mining operations, the manufacture  
of iron, and the general superintendence of the company's mines, works, and general busi-  
ness. Applications for this appointment to be made to GEORGE BRINKLEY, Esq., 24,  
Great George-street, Westminster, London; or to the Secretary, at the offices of the com-  
pany, 2, New Broad-street, City, London.

**TO CAPITALISTS.**—WANTED, a PARTNER in ONE of the  
MOST PROMISING COLLIERIES in NORTH WALES. The royalty is about  
500 acres, and is already proved to contain four valuable seams of coal, adapted both  
for house and steam purposes, and the returns on the capital invested will be at least  
50 per cent. annually. The capital is required for the full development of the concern,  
and if preferred the incoming partner may have the entire management, financially and  
otherwise.—Address, "W. 15," Post-office, Liverpool.

**A GENTLEMAN** of influential connections, and WELL  
ACQUAINTED with the FORMATION and WORKING of JOINT-STOCK  
COMPANIES, is WILLING to AID PERSONS ENGAGED in SOUND UN-  
DER-TAKINGS of that nature.—Apply by letter only, with full particulars, to "G," care of  
Mr. H. Born, newspaper, 115, London Wall, E.C.

**WANTED,** by the advertiser, a SITUATION as ASSAYER of  
COPPER, TIN, LEAD, or SILVER ORE. Accustomed to practical mining in  
all its branches, or mining accounts. Would prefer going abroad. Parties would say  
time and trouble by stating salary given, &c. References on application, as usual.  
Address, "J. W.," MINING JOURNAL office, 26, Fleet-street, London, E.C.

**WANTED,** an OFFER for ONE HUNDRED WEST MARIA  
WHEEL FORSCUE, and FIFTY GUNSLAKE (Chittre).—Apply by  
letter to Mr. R. Mott, No. 5, Westbourne-terrace, Drayton-road, Croydon.

**FOR SALE, a MINE SETT,** in the parish of CAMBORNE,  
CORNWALL, adjoining the Setons.—For particulars, and to treat for the same,  
apply to Mr. J. R. DANIELL, solicitor, Camborne.

**FOR SALE—100 Cornish Clay shares (Limited), at 22s. per share;**  
4 Granber and St. Anby, at 23s.; 5 Wentworth Consols, at 23s.; for cash.  
Apply to WILLIAM SEWARD, 19, Throgmorton-street, London, E.C.

**CAPT. J. RABBY OFFERS FOR SALE FIFTY SHARES,**  
at the net price of £3 per share, in the CAL-PANT MINE, joining the great  
Miners Mine, and one of the best prospects in the district, being all whole ground, and  
the mine paying for itself now at the shallow depth of 40 yards.—Address, Captain J.  
RABBY, Cosport, near Wrexham, Denbighshire, North Wales.

**SHARES FOR SALE IN THE MINERS DISTRICT,**  
WREXHAM, NORTH WALES:—4 Miners Mine, £290; 30 Miners Union, £18;  
50 South Miners, £2; 10 Park, £14; 50 Wynnstay, £4.—Apply to Mr. ALBERT BURY,  
sharebroker, Wrexham.

**MR. E. GOMPERS, MINING OFFICES,**  
3, CROWN CHAMBERS, THREADENEE STREET, LONDON, E.C.  
BUSINESS TRANSACTED IN BRITISH AND FOREIGN STOCKS AND SHARES.  
Terms, 1 1/4 per cent.  
Bankers: London and Westminster Bank.

**MR. THOS. THOMPSON, MINING OFFICES,**  
12, OLD JEWRY CHAMBERS, LONDON, E.C.  
Mr. THOMPSON being intimately acquainted with the LAXEY DISTRICT, in the Isle of  
Man, and its various mines, and continually receiving private and valuable information  
respecting them, will be happy to communicate with anyone thinking of making an in-  
vestment in the mines of this district.

**MESSRS. WARD AND JACKMAN,**  
2, ADAM'S COURT, OLD BROAD STREET, AND  
MINING EXCHANGE, LONDON, E.C.  
Bankers: London and Westminster, Lombard.

**MR. JOHN BATTERS, STOCK AND MINING**  
SHAREBROKER, 12, THROGMORTON STREET, LONDON, E.C., is in  
a position to give sound advice as to the sale or purchase of mining shares, the present  
being one of the most favourable opportunities for speculation or investment to result  
in large profits. List free on application.  
\*SPECIAL BUSINESS in Great North Laxey.

**HARRIS AND CO., STOCK AND SHAREBROKERS,**  
AND FINANCIAL AGENTS,  
15, GEORGE STREET, MANSION HOUSE, LONDON, E.C.

**MR. J. P. ENDEAN, STOCK AND SHAREBROKER,**  
1, CROWN COURT, OLD BROAD STREET, LONDON, E.C.  
Having had 25 years' experience in the mining districts of Devon and Cornwall, and  
three in the London market, with daily information of important changes from qualified  
agents, also the most authentic reports relating to other investments, he is in a position  
to afford the earliest information to his clients, and to direct capitalists whether to buy or  
sell in mines, railways, or other securities.  
Investors should apply to him for reliable information relative to the Chiverton Mines  
also the Camborne and Higoan districts.  
A carefully selected list of sound progressive and dividend shares (certain to give a  
large percentage immediately) forwarded on receipt of 5s. in stamps.  
Orders and telegrams receive immediate attention.

**THE CREDIT FONCIER AND MOBILIER OF ENGLAND (LIMITED), ARE**  
INSTRUCTED TO RECEIVE SUBSCRIPTIONS FOR £1,212,000 A STOCK OF  
**THE METROPOLITAN EXTENSION RAILWAYS**  
OF THE LONDON, CHATHAM, AND DOVER RAILWAY COMPANY,  
In 30,000 provisional scrip certificates to bearer of £40 each.  
With interest guaranteed by Sir S. Morton Peto, Bart., Betts, and Crampton, at 6 per  
cent. per annum on price of issue, payable on amount paid-up as from 1st  
January, 1865; and payment of such interest will be continued  
to 1st July, 1867; by half-yearly payments on 1st  
July and 1st January in each year.  
The first six months' interest will be paid on 1st July, 1865.  
Deposit, £1 per certificate on application, and £4 on allotment.  
Price of issue, £21 for each certificate, equal to £52 10s. per £100 stock.  
Liability limited to amount of subscription.  
The remaining half of this stock, £1,212,000 will not be issued for twelve months, and  
then only as paid-up stock, and at not less a price than £10 per  
£100 stock advance on the present price of issue.

**DIRECTORS.**  
The Right Hon. Lord RONDELE, Leas-court, Faversham, Kent, CHAIRMAN.  
The Lord HARRIS, K.S.I., Grosvenor-square, DEPUTY-CHAIRMAN.  
Sir R. W. CARDEN, Royal Exchange-buildings.  
GEORGE COBB, Esq., Broadgar, Sittingbourne.  
EDWARD W. EDWARDS, Esq., Victoria-street, London.  
WILLIAM GLADSTONE, Esq., 37, Old Broad-street, London.  
CHARLES J. HILTON, Esq., Faversham.  
G. F. HOLROYD, Esq., 8, Sussex-square, Hyde-park, W.  
JAMES LAKE, Esq., Newlands, Sittingbourne.  
Sir C. H. J. RICH, Bart., Nottingham-place, London.  
Sir CUSACK P. RONEY, 15, Langham-place, London.  
Sir JOHN MAXWELL TYLDEN, Milsand, Sittingbourne.  
**SOLICITORS.**—Messrs. Freshfields and Newman, 5, Bank-buildings, E.C.  
**ENGINEERS.**—Joseph Cubitt, Esq., C.E., Great George-street.  
E. F. Turner, Esq., C.E., Parliament-street.  
Secretary—W. E. Johnson, Esq.  
GENERAL MANAGER—J. S. Forbes, Esq.

**PROSPECTUS.**  
The present object is to offer for public subscription the first half of the A stock of the  
Metropolitan Extension Railways of the London, Chatham, and Dover Company, amount-  
ing to £1,212,000, which, with the £1,212,000, to be issued only as fully paid-up stock,  
at not less a price than £10 per cent. increase on the present price of issue, or earlier  
than twelve months hence, completes the amount of £2,424,000, the total amount of  
that stock.  
Full details of the lines and their present position are given at length in the state-  
ment annexed, which, with the maps attached, show the routes of these lines and those  
in connection.  
In considering this stock as an investment, the principal points for consideration are—  
first, the amount of stock to be paid divided up—secondly, the probable receipts—thirdly,  
the minimum dividend per cent. to yield a fair return on the price of issue.  
The capital of the Metropolitan Extension Railways is constituted as follows:—  
Debentures ..... £1,431,000  
B Stock, entitled to 6 per cent. preference ..... 820,000  
C Stock, entitled to 6 per cent. preference after B ..... 1,050,000  
A Stock (present issue) ..... (Entitled to re-  
pay for future issue as fully ..... £1,212,000  
paid-up stock ..... up to 6 per cent. 2,424,000  
£5,733,000  
The total mileage is about 14 miles.  
The traffic on the Metropolitan (Underground) Railway has amounted since 1st Janu-  
ary, 1865, to an average of £673 per mile per week, which is moreover daily in-  
creasing, and at present arises from metropolitan passengers, a trifling amount only of  
through traffic, and no goods being as yet carried on this line.  
When it is considered that the present traffic on the Metropolitan Extension Railways  
of the London, Chatham, and Dover Company is conducted over only two lines of way,  
and with an inadequate amount of rolling stock, also that it is still unfinished, and that  
the portion at work has only recently been opened, it will be observed that the pre-  
sent receipts afford no reliable data upon which to form an estimate of the probable traffic.  
To fix the amount at anything like what is felt by competent judges will be the ac-  
tual result when the enormous traffic that the junctions with the Metropolitan (Under-  
ground), the Great Northern, the Midland, the Great Western, the West London Ex-  
tension, the South-Western, and the North-Western, will bring on the lines, might be  
considered an exaggeration by those inexperienced in the wonderful elasticity of me-  
tropolitan and suburban traffic.  
It is, therefore, thought better not to estimate the probable traffic higher than the  
average of the mileage receipts of the Metropolitan (Underground) Railway, as above  
mentioned—viz., £673 per mile per week. This multiplied by the mileage of the Me-  
tropolitan Extension Lines of the London, Chatham, and Dover Railway Company  
would give a return of £489,914 per annum. From this sum must be deducted  
40 per cent. for working charges, which is a liberal estimate. The net result from  
passengers only may be estimated, therefore, at £293,966 per annum.  
The large goods traffic, which these lines will enjoy alike from the admirable pos-  
ition and number of the stations as from the arrangements made for working the traffic  
will certainly augment the receipts by at least £400,000 net per annum; which, in that  
case, after paying interest on debentures and on the B and C stocks would yield a  
dividend of 5 per cent. on the whole of the £2,424,000 A stock (including the present  
issue), which at the price it is now offered at, would be equal to 10 per cent. per annum.  
The price at which the A stock is now offered must be considered most advantageous  
to the investor, if only one-half of this result is attained; when, however, the in-  
creased receipts would permit a dividend of 5 per cent., the stock must certainly rise  
to par, which would practically be a profit of upwards of 47 per cent. above the price  
of issue.

It is considered that results approaching the above figures will be reached in less than  
two years, and that a steady increase may be further looked for from that time. Ar-  
rangements have, therefore, been made with Sir S. Morton Peto, Bart., Betts, and  
Crampton, to guarantee interest as from January 1, 1865, until July 1, 1867, at the  
rate of 6 per cent. per annum on the amount paid up, by which latter date it is con-  
fidently believed the intrinsic merits of the whole system will have developed themselves.  
The belief entertained as to the augmentation in the value of this stock, when it  
is considered that the lines possess metropolitan termini as well as metropolitan and  
suburban traffic, is borne out by the relative prices of the shares and stock of the  
Great Northern and of the Metropolitan (Underground) Railway Company, before  
they had finished their lines and afterwards, viz.:—  
The Great Northern (A) Stock was, in October, 1863, quoted in the Stock  
Exchange List at £54 per £100 stock; it now is worth £148, or £91 per  
cent. increase in value.  
The Metropolitan (Underground) Railway was in April, 1861, only four  
years ago, quoted in the Stock Exchange List at £44 per £100  
stock; it is now worth £135, or £31 per cent. increase in the value; these  
facts speak for themselves as to the prospects of the stock now offered for  
subscription.

The price of subscription is fixed at £21 per certificate of £40, equal to £52 10s. per  
£100 stock, and the periods of payment are as under—  
£1 per certificate on application.  
4 " " allotment.  
4 " " 1st September, 1865.  
4 " " 1st December, 1865.  
4 " " 1st March, 1866.  
4 " " 1st June, 1866.  
All calls not duly paid will render previous payments liable to forfeiture. When the  
whole amount of £21 per certificate is paid, £40 stock for each certificate will be trans-  
ferred into the name of the then holder thereof.  
The option will be given to all subscribers to pay up in full on allotment (entitling  
them to interest on the whole amount of the price of issue from Jan. 1, 1865) and dis-  
count at the rate of 5 per cent. per annum will be allowed on pre-payment of instalments.  
These two allowances would further reduce the price of issue by about £2 16s. per cent.  
In the allotment those applications, the whole balance on which it is intended by ap-  
plications to be paid in one instalment on allotment will be first considered.  
Application must be made on the forms annexed, and accompanied by payment of £1  
per share (without which no application can be considered), to any of the under-  
mentioned bankers:—The London and County Bank; Messrs. Glyn, Mills, Currie, and  
Co.; the Agricultural Bank (Limited); Messrs. Smith, Payne, and Smith; and  
the National Bank, London, Dublin, and its branches in Ireland; the National Bank  
of Scotland, Edinburgh, and its branches in Scotland. In the event of no allotment  
being made, the deposit will be returned forthwith without deduction; and if less are  
allotted than the number of certificates applied for, the sum paid will be applied towards  
the amount payable on allotment on the number so allotted.  
Prospectuses, with maps, plans, &c., may be had of the undermentioned stockbrokers:—  
Messrs. LAURENCE, SON, and PEACHEY, 9, Angel-court, E.C.; Messrs. J. and A. SCRIE-  
BOUR, 10, Old Broad-street; Messrs. KNIGHT, DALE, and Co., 1, Royal Exchange-  
buildings, E.C.; and of the Credit Foncier and Mobilier of England, Limited (ASPERD  
Low, Esq.), at their offices, 17 and 18, Cornhill, London; and at the offices of the Lon-  
don, Chatham, and Dover Railway Company (W. E. JOHNSON, Esq., secretary), Victoria  
Station, Pimlico, S.W.

**FORM OF APPLICATION TO BE PAID UP BY INSTALMENTS.**  
To the Directors of the Credit Foncier and Mobilier of England (Limited).  
£1,212,000 A Stock of the Metropolitan Extension Railways of the London, Chatham,  
and Dover Railway Company.  
GENTLEMAN.—Having paid to the Bank the sum of £ ..... being  
£1 per scrip certificate of the above stock, in conformity with the prospectus issued by you,  
and I hereby agree to accept such certificates, or any less number that may be allotted  
to me, and to pay the further sum of £4 per certificate due on allotment thereof, and the  
instalments when due.  
Name in full .....  
Usual signature .....  
Address in full .....  
Date ..... May, 1865.

**OR THIS FORM OF APPLICATION TO BE USED BY APPLICANTS DESIROUS**  
OF PAYING THE BALANCE IN ONE INSTALMENT ON ALLOTMENT.  
To the Directors of the Credit Foncier and Mobilier of England (Limited).  
£1,212,000 A Stock of the Metropolitan Extension Railways of the London, Chatham,  
and Dover Railway Company.  
GENTLEMAN.—Having paid to the Bank the sum of £ ..... being  
£1 per scrip certificate of the above stock, in conformity with the prospectus issued by you,  
and I hereby agree to accept such certificates, or any less number that may be allotted  
to me, and to pay the further sum of £20 per certificate due on allotment thereof.  
Name in full .....  
Usual signature .....  
Address in full .....  
Date ..... May, 1865.  
\* Insert Bankers' Name.

**HENRY AND CO., RAILWAY AND GENERAL**  
IRON MERCHANTS.  
CONTRACTORS FOR ALL DESCRIPTIONS OF RAILWAY PLANT AND STORES.  
AGENTS FOR STEEL COAL, &c.  
165, GRESHAM HOUSE, OLD BROAD STREET, CITY, LONDON.

**NOTICE.—LATE POLHIGY MOOR MINE**, in the Parish of WENDRON, CORNWALL.—ALL PERSONS HAVING CLAIMS on the above mine will be pleased forthwith to SEND THE PARTICULARS THEREOF to the FURMER, MR. WILLIAM POLKINGHORNE, Woodlands, near Par Station; and ALL INDIVIDUALS INDEBTED to the Company are REQUESTED TO PAY what they owe, without delay, to the said WILLIAM POLKINGHORNE.  
Dated May 17, 1885.

**ST. DAVID'S GOLD MINING COMPANY (LIMITED).**—An EXTRAORDINARY GENERAL MEETING of the shareholders in this company will be HELD at the London Tavern, Bishopsgate-street, in the City of London, on TUESDAY, the 30th day of May, 1885, at Two o'clock.  
By order of the Board, EDWARD JOHN EVANS, Sec. pro tem.  
Bond-court House, Walbrook, London, E.C., May 18, 1885.

**THE WEST CANADA MINING COMPANY (LIMITED).**—Notice is hereby given, that the SIXTH ORDINARY GENERAL MEETING of the shareholders of this company will be HELD at this office, on THURSDAY, the 25th day of May inst., at Two o'clock at noon precisely, to receive the reports and accounts for the year ending 31st December, 1884, to declare a dividend, and for general purposes, as authorised by the Articles of Association.  
Two directors—viz., William Gladstone, Esq., and Charles Morrison, Esq., will retire from office at this meeting by rotation. They are both eligible, and purpose offering themselves for re-election.  
The auditor, Joseph George, Esq., will also retire from office, but will offer himself for re-election.  
By order of the Board, W. G. WILLIAMS, Sec.  
5, Queen-street-place, London, E.C., May 17, 1885.

**THE GREAT BARRIER LAND, HARBOUR, AND MINING COMPANY (LIMITED).**—Notice is hereby given, that the EIGHTH ORDINARY GENERAL MEETING of shareholders in the above company will be HELD on TUESDAY, the 30th day of May inst., at the office, No. 8, Austinfriars, in the City of London, at One o'clock precisely.  
By order of the Directors, J. H. MURCHISON, Secretary.  
May 12, 1885.

**THE GREAT DELABOLE SLATE COMPANY (LIMITED).**—Incorporated under the Companies Act, 1862, by which the liability of the shareholders is limited to the actual amount of their shares.  
Capital £50,000, in 50,000 shares of £1 each.  
Calls not to exceed 5s. per share, not to be made at less intervals than three months. It is calculated that not more than £1 10s. per share will be required to be called up.  
Should no allotment be made the deposit money will be returned in full.  
A dividend of £10 per cent. upon the paid-up capital for the first year will be guaranteed by the vendor.  
DIRECTORS.

GEORGE FURNES, Esq., Contractor Thames Embankment Works, and 36, George-street, Westminster.  
RAPHAEL BRANDON, Esq., architect, 65, Regent-street, W.  
BENJAMIN COBB, Esq. (Benjamin Cobb and Co.), 84, Fenchurch-street, E.C.  
BERNARD PHILLIPS, Esq., 29, Rutland-gate, Hyde-park, W.  
EDWARD ROBERTS, Esq., architect, 25, Parliament-street, S.W.  
EDWARD GIBSON SWANN, Esq., 31, Threadneedle-street, E.C.  
BANKERS—The Imperial Bank, Lombard-street, London.  
SOLICITORS—Messrs. Bennett and Stark, 4, Farnival's Inn.  
MANAGING DIRECTOR—Benjamin Cobb, Esq.  
OFFICES.—34, FENCHURCH STREET, E.C.

**ABRIDGED PROSPECTUS.**  
This company has been formed for the purpose of purchasing and working on a more extended scale the Tremat Delabole Slate Quarries, and of ultimately acquiring other valuable quarries in the Delabole district.  
Applications for shares to be made to Messrs. WATSON and COCK, St. Michael's-alley, Cornhill, London, E.C.; to the managing director, at the office of the company, 34, Fenchurch-street, London, E.C.; or to the solicitors, where specimens of the slate may be seen, and prospectuses, with form of application, obtained.

**ISAAC FRANCIS, NANT, WREXHAM**, a dresser of 30 years experience, is OPEN TO INSPECT ANY DRESSING PLACE on moderate terms. MR. FRANCIS can introduce PLANS AND IMPROVEMENTS that will SAVE THIRTY PER CENT. COST in certain departments of any dressing floors.

**ASSAYS AND ANALYSES.—MR. JOSEPH GREEN**, for the past 14 years professional assayer to the Chester Goldsmiths' Company, UNDERTAKES THE ASSAYING AND ANALYSIS OF EVERY DESCRIPTION OF MINERAL.—Assay Office, Chester.

**MR. D. STICKLAND, M.E.**, having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE thereon.  
MINES INSPECTED AND FAITHFULLY REPORTED ON. DEALER IN MINING, RAILWAY, AND OTHER SHARES.  
His monthly Circular forwarded on receipt of six postage stamps.  
Criddis Mine, St. Issey, Padstow, Cornwall.

**BARRETT AND CO., 9, SPRING GARDENS, CHARING CROSS, STOCK, SHARE, AND FINANCE BROKERS**, transact business of every kind in British, Foreign, and Colonial Stock, Shares, Bonds, Debentures, Mines, Miscellaneous Investments, including American Government Securities, Confederate States Securities, Spanish, Mexican, and other stocks, and are in direct communication with the powerful banks and brokers in all European towns and cities, in the Federal and Confederate States, and in the Canada. The earliest and most accurate information received on monetary matters. Investment Circular gratis.  
9, Spring-gardens, S.W., March 4, 1885.

**MR. CHARLES BAWDEN, MINE AGENT, ST. DAY**, SCORRIE, CORNWALL, from recent inspections, is in a position to advise what mines to invest in, and what to avoid, two of which he will guarantee all loss for one-half the profits for the next six months. Terms for inspection and report, £2 2s. per day. WANTED TO PURCHASE, 20 Tresavean shares.

**CAPT. C. WILLIAMS, TYN-Y-WERN, TALEISIN**, via SHREWSBURY, has had upwards of 30 years' practical experience in mining, during which time he had the entire management of several English and Welsh mines. Residing in the centre of the CARDIGANSHIRE MINING DISTRICT, and in close proximity to those of MERIONETHSHIRE and MONTGOMERYSHIRE, he OFFERS HIS SERVICES TO SURVEY AND REPORT UPON ANY MINE.

**CAPT. CHARLES WILLIAMS** is at all times in a POSITION TO FURNISH CAPITALISTS WITH RELIABLE INFORMATION respecting MINING IN NORTH AND SOUTH WALES, in which they should embark or avoid. C. WILLIAMS has prepared a list of most of the mines that are likely to pay, and can name two or three that will turn out a great price.  
Tyn-y-wern, Talleis, via Shrewsbury, April 18, 1885.

**BRITISH AND FOREIGN INVESTMENT.**—MR. THOMAS SPARGO, STOCK, SHARE, AND MINING BROKER, 224, and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C., TRANSACTS EVERY DESCRIPTION OF BUSINESS IN THE PURCHASE AND SALE OF SHARES IN BANKS, CANALS, MINES, RAILWAYS, BRIDGES, INSURANCES, AND ALL OTHER DESCRIPTIONS OF BRITISH AND FOREIGN STOCK.

Mr. Spargo has for sale shares in English mines paying from 10 to 20 per cent. upon the present price, in bi-monthly and quarterly dividends, as also a number of shares in good progressive mines, some of which he with confidence specially recommends to the public as sound investments.  
Mr. Spargo gives every information as to position and prospects of all mining undertakings, upon application, either personally or by letter, and is enabled, through his long experience, aided by his monthly visits to Cornwall, Devon, and Wales, to obtain the most reliable information as to the numerous mines in those districts. He will at all times give the best advice as to investment in mines, and, if necessary, inspect them himself; as in all cases he wishes to be guided by the intrinsic value of the property. Upon the receipt of 5s. he will furnish a selected list of dividend and progressive companies.

Mr. Spargo has published the following works, viz.:—  
Statistics and Observations upon the Mines of Cornwall, 1880, price 2s. 6d.  
Ditto ditto ditto ditto ditto ditto 1880, price 2s. 6d.  
Ditto ditto ditto ditto ditto ditto 1882, price 3s.  
Ditto ditto ditto ditto ditto ditto 1884, price 3s.  
Physical, Geological, and Parish Map of Cornwall. Scales, three miles to an inch. Printed in three colours, showing distinctly the mining districts, the height of the hills, &c. Price 10s. 6d., on cloth and rollers.  
Geological maps of the various mining districts, showing the boundary line of each mine, with the lodes, cross-courses, and elvan courses by which it is traversed. Price 2s. 6d. each.  
A Model, or Relief, map of Cornwall (6 ft. 6 in. by 5 ft.), presenting the names of every town and village, as also every characteristic point of the county. Price £3 5s.  
Dividends received, calls paid, and all orders promptly negotiated.  
Commission 1½ per cent.

Mr. Spargo has 20 years' experience of mining, ten of which he was engaged in practical mining, and ten years he has transacted business in mining shares and stock, at 224 and 225, Gresham House, Old Broad-street, City, E.C.  
Mr. Spargo's Statistics for 1885 will soon be published.  
Bankers: Bank of London, and the Metropolitan and Provincial Bank (Limited.)

**GOVERNMENT SECURITIES, JOINT-STOCK BANKS, RAILWAY DEBENTURES, AND BONDS, COLONIAL SECURITIES, FOREIGN BONDS, AND BRITISH MINES.**—Messrs. TREDENNICK AND CO., of 18, LOMBARD STREET, LONDON, E.C., may be consulted confidentially as to the eligibility of all bond and stock investments. A selected list forwarded on application.

Just published: size 4 ft. 6 in. by 2 ft., scale 10 chains to an inch; published price, 27s.; mounted on rollers, or in case, 26s.

**A PHYSICAL AND GEOLOGICAL MAP OF THE MINERAL LEAD MINES**, with the BRYMBO and RUABON COAL FIELD.  
By BRENTON SYMONS, Mining Engineer, &c.  
Copies may be procured at the offices of the author, 18, Hatton-garden, E.C., or 19, Fydar-street, Truro; of GEORGE DARLINGTON, Esq., Wrexham; and at the office of the MINING JOURNAL, 26, Fleet-street, London.

**ACCIDENTS TO LIFE OR LIMB, in the FIELD, the STREETS, or at HOME**, provided for by a Policy of the RAILWAY PASSENGERS' ASSURANCE COMPANY, 64, CORNHILL, LONDON, E.C.

Compensation has been paid for 10,000 claims.  
£1000 in case of Death, or £5 per week while laid up by Injury, secured by An Annual Payment of from £3 to £5 5s.  
For particulars apply to the Clerks at the Railway Stations, to the Local Agents, or at the Office.  
64, CORNHILL, and 10, REGENT STREET.  
W. J. YIAN, Sec.

## THE MINING JOURNAL.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

**IN THE MATTER OF THE COMPANIES ACT, 1862, and of the OLD WHEEL NEPTUNE MINING COMPANY (LIMITED).**—TO BE SOLD, by direction of the liquidators of the said company, with the sanction of the Court, BY PUBLIC AUCTION, at OLD WHEEL NEPTUNE MINE, in the parish of Goldsithorne, near Marazion, Cornwall, on Tuesday, the 6th day of June next, at Twelve o'clock at noon, together or in lots, all the INTEREST of the said company and of the MINE SETTS or GRANTS by virtue of which the mining operations of the said company have for some time past been carried on, and the undermentioned MINING MACHINERY, MATERIALS, and OTHER EFFECTS, viz.:—  
One 70 in. cylinder PUMPING ENGINE, 12 ft. stroke, equal beam.  
TWO BOILERS, 11 tons each, with fittings complete.  
PORTABLE ENGINE, 8 horse power.  
60 ft. shears complete, 10 arm capstan, oak axle, iron sockets and braces; 220 fms. of 13 in. capstan rope, new; balance bob, with box complete; crusher, lot of valuable pit-work, new and old timber and iron, whim and capstan ropes, chain, boring machine, air ditto, 50 tons of coals, together with the account-house and office furniture, and a quantity of other articles and effects in general use in mines.

The mine, machinery, and materials may be inspected at any time prior to the sale, by application at the mine.  
HODGE, HOCKIN, AND MARRACK, Truro  
(The Solicitors for William Polkinghorne, one of the liquidators of the said company).  
H. S. STOKES, Truro  
(Agent for Benham and Tindell, 18, Essex-street, Strand, London, the solicitors for William Joseph White, the other liquidator of the said company).  
Dated Registrar's Office, Truro, May 17, 1885.

**GURLYN MINE, ST. ERTH, CORNWALL.**  
TUESDAY, MAY 20, 1885.

**MR. R. H. CADE** has received instructions to SELL, BY AUCTION, on Tuesday, the 23rd day of May instant, at Eleven o'clock in the forenoon, at GURLYN MINE, in the parish of St. Erth, the following VALUABLE MATERIALS and MACHINERY, viz.:—  
A 40 in. cylinder PUMPING ENGINE, nearly new, 9 ft. stroke, equal beam, with TWO BOILERS 11 tons each.

50 fms. 16 in. 9 ft. pumps.  
1 16 in. plunger pole.  
1 16 in. H piece.  
1 16 in. top doorpiece.  
1 16 in. windbore.  
1 17 in. pole case.  
1 15 in. working barrel.  
1 15 in. doorpiece.  
1 15 in. windbore.  
40 fms. 11 in. 9 ft. pumps.  
2 12 in. H pieces.  
2 11 in. doorpieces.  
2 11 in. pole cases.  
2 11 in. windbores.  
2 12 in. 10 ft. poles.  
5 13 in. 9 ft. pumps.  
1 12 in. working.  
1 12 in. doorpiece.  
1 12 in. windbore.  
2 10 in. workings.  
1 10 in. doorpiece.  
1 10 in. windbore.  
Pigging bolts and bars.  
Strapping plates.  
Rod pin.  
40 fms. 7 and 8 in. wood rods.  
Staples and glands.  
Wood balance-bob.  
Also at GURLYN STAMPS, near Relabbus:—  
A WATER WHEEL 18 ft. in diameter, 9 ft. breast; 2 iron axles for 12 heads each, 12 stamps heads, calisher complete, frames, dressing-floors, kieves, &c., and the whole of the tin leavings.  
The machinery and materials will be found of the best description, and in excellent working order, and will be sold in lots to suit the convenience of purchasers.  
The mine is situated about four miles from Hayle, Marazion, and the St. Ives-road station on the West Cornwall Railway.  
For further particulars, apply to the Auctioneer, Menage-street, Helston.  
Dated May 11, 1885.

**IMPORTANT SALE OF MINING PLANT, at CLEATOR MOOR, BIRGIG MOOR, AND WHITEHAVEN.**  
**MR. PORTER KITCHIN WILL SELL, BY AUCTION**, by order of the Executors of the late Anthony Hill, Esq., the whole of the VALUABLE MINING PLANT, consisting of STEAM ENGINES, BOILERS, PUMPS, MACHINERY, CASTINGS, WATER CISTERNS, TIMBER, HORSES, CARTS, CART GEAR, &c., on the 29th, 30th, and 31st days of May inst., viz.:—  
At Cleator Moor, on Monday, the 29th May.  
At Birgig Moor, on Tuesday, the 30th May.  
At Whitehaven, on Wednesday, the 31st May.  
In such lots and on such conditions as shall be there and then produced. Sale to commence at noon each day.  
PORTER KITCHIN, Auctioneer.  
N.B.—Catalogues may be had on application to the Auctioneer, 17, Lowther-street, Whitehaven.

**VALUABLE MINE SETT AND MACHINERY FOR SALE.**  
**MR. H. V. NEWTON** is instructed to SELL, BY AUCTION, on Tuesday, the 30th day of May, 1885, at the account-house, on the mine, all that very VALUABLE MINE SETT, together with the MACHINERY and MATERIALS thereon (in One Lot), called WHEAL CROFTY, situated in the parish of Illogan, in the county of Cornwall.  
This mine is very extensive, and splendidly located, being bounded by and adjoining South Crofty, Tincroft, Cook's Kitchen, Dolcoath, North Roake, and North Crofty, and is held under a lease from J. F. Basset, Esq., for 21 years, of which 9 years are unexpired.  
For a view of Wheal Crofty, and all further information, apply to THOS. FIELD, Esq., Marazion; Capt. W. SKRIVS, Camborne; or to the Auctioneer, Camborne.  
Dated May 17, 1885.

**FOREST OF DEAN, GLOUCESTERSHIRE.**  
**VALUABLE MINING PROPERTY.**  
**MR. JOHN COLEMAN** has received instructions to OFFER FOR SALE BY AUCTION, at the Speech House Hotel, in the Forest of Dean aforesaid, on Saturday, the 10th day of June, 1885, at Two o'clock in the afternoon precisely, subject to conditions to be then produced, the undermentioned UNDIVIDED PARTS or SHARES of and in the several under-mentioned GALES or IRON and COAL MINES, in the following Lots, viz.:—  
Lot 1.—An UNDIVIDED MOIETY or equal HALF-PART or SHARE of and in all that very valuable unopened GALE or IRON MINE, called DRYBROOK IRON MINE, situate and extending from the Morse, near Mithelcote to Lydbrook.  
Lot 2.—An UNDIVIDED MOIETY or equal HALF-PART or SHARE of and in a certain divided part of that very valuable unopened GALE or IRON MINE, called PENSWELL IRON MINE, lying to the Deep, and near to the Edge Hill Works of the Dowlais Iron Company.  
Lot 3.—An UNDIVIDED MOIETY or equal HALF-PART or SHARE of and in all that very valuable unopened GALE or IRON MINE, called SYMOND'S ROCK IRON MINE, lying within an easy distance of the proposed Monmouth and Ross Railway.  
Lot 4.—An UNDIVIDED MOIETY or equal HALF-PART or SHARE of and in all that unopened GALE or COAL MINE, called FULL MOON COLLIERY.  
Lot 5.—An UNDIVIDED MOIETY or equal HALF-PART or SHARE of and in all that unopened GALE or COAL MINE, called TWENTY INCHES COLLIERY.  
Lot 6.—An UNDIVIDED MOIETY or equal HALF-PART or SHARE of and in all that unopened GALE or COAL MINE, called SETTING SUN COLLIERY.  
Lot 7.—An UNDIVIDED MOIETY or equal HALF-PART or SHARE of and in all that unopened GALE or COAL MINE, called NEW MILL ENGINE COLLIERY.  
Lot 8.—An UNDIVIDED MOIETY or equal HALF-PART or SHARE of and in all that unopened GALE or COAL MINE, called CHURCHWAY No. 2 COLLIERY.  
Lot 9.—An UNDIVIDED MOIETY or equal HALF-PART or SHARE of and in all that unopened GALE or COAL MINE, called ROBERTS' FOLLY COLLIERY.  
Lot 10.—An UNDIVIDED MOIETY or equal HALF-PART or SHARE of and in all that GALE or COAL MINE, called REGULATOR, No. 4 COLLIERY.  
Lot 11.—An UNDIVIDED MOIETY or equal HALF-PART or SHARE of and in all GALE or COAL MINE, called FORMENTON AND TEAZELL COLLIERY (except a small part thereof which has been sold to Mr. Peter Constable).  
Lot 12.—An UNDIVIDED MOIETY or equal HALF-PART or SHARE of and in all that GALE or COAL MINE, called TRUE BLUE COLLIERY.  
Lot 13.—An UNDIVIDED MOIETY or equal HALF-PART or SHARE of and in all that unopened GALE or COAL MINE, called NEW LEATHER PIT COLLIERY.  
Lot 14.—An UNDIVIDED MOIETY or equal HALF-PART or SHARE of and in all that unopened GALE or COAL MINE, called DITCH PIT COLLIERY.

All the above iron and coal mines are situate in the Forest of Dean aforesaid, and are held under grants from the Crown, made in pursuance of the Act 1 and 2 Vict. c. 49, and the several lots will be sold subject to the Gales Rents and Royalties, payable to the Crown in respect thereof respectively, and also subject to all other the rights of the Crown under or by virtue of the said Act, and of the Act 24 and 25 Vict. c. 40, and the rules and regulations affecting gales, iron mines, and collieries in the Forest of Dean. Plans and descriptions of the above gales can be inspected at the office of the Deputy-Gaveller of the Forest of Dean, at Coleford; and further particulars may be obtained on application to Mr. A. J. BRAIN, solicitor, the Hawthorns, near Mithelcote; or to the auctioneer, the Speech House, near Coleford.

**GLYN, NEAR LLANGOLLEN, DENBIGHSHIRE—SLATE AND FLAG QUARRIES, AND FARMS.**  
**MESRS. HILL AND SON WILL SELL, BY AUCTION**, on Thursday, the 29th day of June, 1885, at the Royal Hotel, Llangollen, in the county of Denbigh, at Three o'clock in the afternoon, in Six Lots, or in such other lots as shall be declared at the time of sale, and subject to conditions to be then produced, the EXTENSIVE and VALUABLE SLATE and FLAG QUARRIES, MES-SAGES, or DWELLING-HOUSES, and about TWO HUNDRED ACRES of PASTURE, ARABLE, and WOOD LAND, situate in the parish of Llangollfraid Glyn Ceirion, in the county of Denbigh, the property of the trustees of the late John Wynne, Esq. These quarries have been worked by the proprietors for many years, and have an inexhaustible supply of excellent rock.

They are six miles from Chirk first-class station on the Great Western Railway, and from the wharf at Chirk Viaduct of the Shropshire Union Railways and Canal Company, whereby excellent accommodation is afforded for transit to all parts of the kingdom. The new road from Chirk to Llangollfraid runs very near to the quarries.  
The lands are of good quality for agricultural purposes, and they offer many splendid sites for the erection of mansions and villas.

The Vale of Glyn, in which this estate is situate, is one of the most picturesque in the Principality, and the River Ceirion, which runs through the vale, affords capital sport to the angler.  
The timber to be taken at a valuation to be produced at the sale.  
Printed particulars, with maps, may be had on application to Messrs. HILL and SON, estate agents and auctioneers; or Messrs. THOMAS and CHARLES MINSHALL, solicitors, Oswestry.

**THE BISHOPWEARMOUTH IRONWORKS, Sunderland.**  
**TO BE SOLD, BY PRIVATE CONTRACT, the VALUABLE FREEHOLD and COPYHOLD PROPERTY**, known as the BISHOPWEARMOUTH IRONWORKS, together with the FIXED MACHINERY, PLANT, and UTENSILS IN TRADE, capable of producing annually about 15,000 tons of cast-iron, and merchants' bars, 200 tons of large forgings, and 2500 tons of castings. The works comprises an area of 124. 11. 11 1/2, or thereabouts, and has a frontage of 300 yards next to the Hyllon Road. The North-Eastern Railway forms the western boundary of the property, and affords communication with Sunderland Docks (about 10 miles distant), and with all parts of the kingdom. The Bishopton Colliery Railway intersects the property, and the Hutton Colliery, Railway forms its eastern boundary, thus ensuring a supply of coals direct from the pits at a very low price.

Particulars and cards to view may be obtained on application to JES. ANDERSON, Esq., solicitor, Westgate-street, Newcastle-on-Tyne, by whom offers, in writing, for the purchase of the whole, or part only, will be received up to July 1, 1885.

**FLINTSHIRE.**  
**TRIMLEY HALL (82 Acres) LEAD MINES, LIME ROCK, &c.** This VALUABLE ESTATE will be OFFERED BY PUBLIC AUCTION, July 22, 1885. Particulars in future advertisements.  
WITHERTON AND PETTY, Solicitors, Manchester.

**SPARE MINING MATERIALS FOR SALE, at WHEAL FALMOUTH AND SPERRIES MINE, BALDHU, near TRURO, viz.:—**  
29 ft. 19 in. pumps.  
4 bottoms, with windbores, working bars, rais, and doorpieces to match.  
1 6 ft. 15 in. flat-bottom windbore.  
H piece and top door.  
1 15 ft. 18 in. plunger pole.  
Stuffing box and gland.  
1 4 ft. 9 in. matching.  
2 3 ft. 19 in. ditto.  
1 2 ft. 6 in. 19 in. ditto.  
1 2 ft. 6 in. 18 in. ditto.  
2 pairs 8 in. strapping plates, 22 ft. long.  
24 fms. 2 1/2 in. bucket rods, with capstan joints.

2 pairs faggotted iron.  
3 pairs faggotted checks.  
1 pair 19 in. yokes.  
1 large slotted shieve.  
1 18 in. bucket prongs.  
2 underground tram wagons.  
1 15 1/2 in. pitch pine rod, 52 ft. 6 in. long.  
1 15 1/2 in. pitch pine rod, 28 ft. 6 in. long.  
1 15 1/2 in. pitch pine rod, 25 ft. 6 in. long.  
5 pair rubbing blocks.  
1 9 ft. 16 in. shaft roll.  
1 8 in. shaft rolls.  
Several tons of railroad iron and nails.  
Several tons staples and glands.

The above are in good condition, and nearly equal to new.—To view, and for prices, apply to the agents on the mine.—Dated May 16, 1885.

**TO BE SOLD, the LEASEHOLD LANDS and PREMISES** with the BUILDINGS, ERECTIONS, and WORKS thereon, situate at BRYMBO, in the parish of WREXHAM, in the county of DENBIGH. The premises named have been recently fitted up in the most perfect manner for carrying on the business of lead smelting and desilvering, and are extremely well adapted for the business. They are contiguous to coals of the best quality for smelting, and also to Great Miners and other mines, producing very superior and easy-working lead ore. The sale of these works presents an opportunity to anyone desirous of carrying on the business of smelting and desilvering lead, possessed of the requisite capital, or to anyone with the necessary amount of influence to form a limited liability company for this purpose.

The works may be visited by anyone applying to Mr. JOHN MATHER, Manchester Chambers, Deansgate, Manchester, who will also give any information that may be required respecting them.

**GLASS BOTTLE WORKS, COTTAGES, AND GROUNDS** FOR SALE, at SOUTH STOCKTON-ON-TEES, in the County of YORK. TO BE SOLD, BY PRIVATE CONTRACT, to close a Trust Estate, all those GLASS BOTTLE WORKS, situate at SOUTH STOCKTON, consisting of THREE LARGE and ONE SMALL BOTTLE HOUSE, POT LOFTS, WAREHOUSES, OFFICES, ENGINE HOUSE, FORGE, COAL DEPOTS, &c., together with NINETEEN VACANT COTTAGES, MANAGER'S HOUSE, and a LARGE PIECE of VACANT GROUND. The works are situate between the Stockton and Darlington Railway and the River Tees, having an excellent quay, recently built, adjoining the latter, and a siding communicating with the railway. A profitable business has been carried on at the above premises for many years by the present tenants, Messrs. Brown, Bailey, and Co., which are well adapted for the trade, or could be readily altered for ironworks or any other purpose. The premises are freehold, and contain upwards of two acres, and may be viewed by permission of the tenants.

Apply to Messrs. J. and R. S. WATSON, solicitors, Arcade; or Mr. W. H. HARRIS, 67, Westgate-street, Newcastle-on-Tyne.

**IRON ORE.**—An important deposit of HEMATITE, recently discovered at CROFTENDS, near APPLEY, WESTMORELAND (close to a railway), TO BE DISPOSED OF BY PRIVATE TREATY.—Apply to Mr. ATKINSON, owner, on the estate.

**IRON ORE ROYALTY TO BE LET.**—TO BE LET, for such a term of years as may be agreed upon, the ROYALTY of HODDYAD HODDYAD ESTATE, in the parish of LAMPLUGH, near COCKERMOUTH, CUMBERLAND. The estate is within a ring fence, and embraces an area of 70 A. 1 R. 1 P., the same more or less. One end contains limestone and whinstone, and the other end red sandstone. Iron ore is visible in two or three different places, with more red rock in view than can be found in any other locality in the same parish, which contains a great quantity of iron, and the estate is but one computed mile from the railway station at Ullock, on the Cleator and Maron Valley Extension, which, it was stated at the last half-yearly meeting, would be opened and ready for traffic in August. The advantage, Mr. John Bowman, will be given to show the above royalty to any enterprising person or persons who may wish to take or rent the same, and from him further particulars may be known.—Hoddyad House, near Cockermouth.

**THE ESTATE OF ALEXANDER BOYD, Esq., BALLYCASTLE, COUNTY ANTRIM.**  
**TO IRON AND COAL MASTERS.—TO BE LET**, in one or more divisions, the WELL-KNOWN and EXTENSIVE MINERAL FIELD of the BALLYCASTLE ESTATE, COUNTY ANTRIM, IRELAND, the property of Alexander Boyd, Esq., comprising an area of about nine square miles, containing good Coal Fields, and several Ores of Iron, including the Blackband, Clay Ironstone, Hematite, Iron Pyrites (as well known in the Glasgow market), with their associated minerals, Fire-clay, Shale, Blue Limestone, Freestone, &c.; in short, every requisite for the establishment of blast-furnaces, with a sea frontage and a shipping pier at hand. The best seams of coal on the coast line, and more than one-half of the entire area of the whole field, although proved, have never been touched.—For full particulars, apply to Mr. JOHN B. DOYLE, agent, The Mansion, Ballycastle, County Antrim.

**RICH MINERAL INVESTMENTS TO LET.**  
1. The BRITISH COPPER COMPANY'S SETTS of the ERISA MINES, as advertised by Mr. Allison, which they were unable to lease. The mines are all proved to be the richest copper ore in Scotland.—2. A SETT of RICH WOLFRAM, Lead, and ZINC ORES. These ores are now proven to yield £18 to £22 a ton. Two tons are 2 1/2 ft. wide, and a rich cross-course cuts the whole lode. Also, close by a LODE of MAGNETIC IRON.—3. The CHAMPION LODE of LEAD ORE, 7 to 9 ft. wide, overlaid by blue flint and fine blue sulphur ore, by assay 34 per cent. Also, DEPOSITS of HEMATITES, 50 to 60 per cent. iron; and CHALCOPRITE or SPATHE ORE, 34 per cent. Also, MAGNETIC IRON ORE, in veins 40 ft. wide. These minerals are all open to inspection, and will be let on leases of 15 to 30 years, on reasonable terms.—Apply to W. FORTESCOE, Esq., Lechliffe; or to Mr. MIDDLETON, Esq., Mining Journal office, 26, Fleet-street, London, E.C.

**GRANITE QUARRY, CLOSE TO A RAILWAY.—TO BE LET**, for such term of years as may be agreed on, the RIGHT to QUARRY the GRANITE immediately adjoining, and in certain places intersected, by the Portpatrick Railway, between Gatehouse and New Galloway Stations, on the estate of H. O. Stewart, Esq. The grey granite, which is pronounced excellent by good judges, has been worked with great success for the supply of materials for two large viaducts adjoining. There is also red granite, which, it is believed, will prove to be plentiful, and of very good quality and colour.—The Granite Quarry, Portpatrick Railway Company will afford facilities for the working of quarries at the above-mentioned locality. There is easy railway communication from the proposed quarries to the water's edge at the Harbour of Kirkcubright.  
Offers to be sent, in writing, to H. J. MOULLE, factor, Gatehouse of Fleet, Stewartry of Kirkcubright. At his office further information may be obtained, and specimens of the granite may be seen. There is no obligation to accept the highest or any offer.

**FOR SALE, the RIGHT to the PATENT of a VALUABLE IMPROVEMENT in VALVES and BRACKETS for PUMPS, and in VALVES or COCKS for OTHER USES.**—For particulars, apply to Mr. W. T. HAWES, patent and mining agent, 39, Budge-street, Bristol.

**HORIZONTAL ENGINES FOR SALE**, at very low prices.—One 12 in. cylinder, 24 in. stroke; one 12 in. cylinder, 36 in. stroke; and two 14 in. cylinders, 24 in. stroke. All ready for delivery, and may be had with or without fly-wheels. Apply to Messrs. E. PAOR and Co., Laurence Pountney-place, London. Pountney-hill Cannon-street E.C.

**MANCHESTER, AND WEST END OF LONDON.**  
**MR. W. HANNA M. MINING, SLATE QUARRYING, INSURANCE, AND GENERAL SHAREBROKER.**  
ROYAL INSURANCE BUILDINGS, KING STREET, MANCHESTER; and 21, REGENT STREET, LONDON, S.W.  
INSTANTANEOUS COMMUNICATION with the STOCK and MINING EXCHANGES, avoiding the delay and annoyance of visiting the City to ascertain prices.  
A Monthly Investment Circular on application.

**MINING OFFICES, MANCHESTER.**  
**THOMAS MOLYNEUX AND CO., MINE AGENTS**  
SHAREBROKERS, and GENERAL COMMISSION AGENTS.  
Information can be obtained as to purchased and sold shares.  
Office of the Hazel Grove Silver-Lead Mining Company (Limited), Flintshire. For prospectuses, reports, &c., of this valuable property may be had on application to 20, Finsbury-street, Manchester.

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MANCHESTER.  
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AGENTS, and SHAREDEALERS, CLARENCE CHAMBERS, 10, CHESTER, are at all times in a position to deal in all the market Dividend and progressive Mine shares, and also to advise on all mining matters, being personally acquainted with the business, and having a daily communication from the mining districts of Devon and Cornwall.  
Messrs. HARVEY and Co. publish a monthly "Mining Circular," containing a valuable summary of mining information. Forwarded gratis on application.  
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Bankers: The Consolidated, Manchester; and the Alliance, Lombard-street, London.

**MR. BRENTON SYMONS INSPECTS and REPORTS on ANY MINERAL PROPERTY.** In all cases where procurable a plan will be company his report.—18, Hatton-garden, E.C.

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AS NOW ADAPTED BY LENK'S PROCESS  
IS THE CHEAPEST AND SAFEST EXPLOSIVE,  
AND FREE FROM SMOKE.  
Price and directions for use on application to the Manufacturers,  
THOMAS PRESTICE AND CO.,  
STOWMARKET, SUFFOLK.

DAVY LAMP OIL, £35 PER TON  
(Lamp once filled burns for 14 hours, and one week lasts two months).  
MINERS' DIP LAMP OIL, £30 PER TON  
(For the Metal Dip Candle Lamp).  
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SAFETY FUSE.—Messrs. WILLIAM BRUNTON AND CO.,  
FEXHALLICK, POOL, near CAMBORNE, CORNWALL, and BRYMBO, near  
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Arctic Expedition, and every part of the globe.  
For the convenience of their customers and others in the North, W. BRUNTON and Co.  
have recently erected a branch MANUFACTORY at Brymbo, near Wrexham, where, as at  
Fexhallick, they are at all times PREPARED TO EXECUTE UNLIMITED ORDERS  
FOR SUPPLYING FUSE upon warrant that it will prove equal to, if not better than  
any to be procured elsewhere.

CHARLES DAVEY AND CO.,  
SAFETY FUSE MANUFACTURERS,  
ST. HELEN'S JUNCTION, LANCASHIRE.

THE CLUTCH SAFETY CAGE, IMPROVED.—  
The improvement consists in its having only a single spring, which is strong  
enough to take the lift of the loaded cage; to overhaul the broken rope, however distant  
the fracture may be; and yet so conditioned that it cannot bring the clutches into play  
until the rope is broken. It is an ordinary carriage spring, and can be replaced, when  
needed, at any coach-work. Makers of cages, or inventors, who may wish to combine  
the safety clutch with their own improvements are respectfully informed that liberty  
to do so will be granted to them on easy terms.—Apply to the patentee, ROBERT ARTHUR  
JONES, Farnham, Surrey.

## PATENT CONCRETE STONE

(RANSOME'S PATENT).  
For STRENGTH, DURABILITY, CHEAPNESS, SHARPNESS OF OUT-  
LINE, BEAUTY OF APPEARANCE, and above all for its PERFECT RESEM-  
BLANCE to NATURAL STONE, stands unrivalled, and being MADE WITHOUT  
BURNING is free from all liability to shrinkage or distortion. It surpasses all other  
material in its applicability to every description of ARCHITECTURAL EMBELLISH-  
MENTS, and especially for CAPITALS, CORNICES, WINDOW DRESSINGS,  
balustrades, gates, pillars, terminals, &c., as well as for fountains, vases, jardinettes,  
statues, flower boxes, and edgings for garden borders; also for monuments, tombs, and  
all kinds of cemetery requirements.  
Licences granted for the manufacture of this remarkable material, and agents ap-  
pointed in every part of the United Kingdom.  
References given to works already executed, and to several engineers and architects  
of the highest eminence by whom it has been applied, also to existing licences whose  
works are in full operation in different parts of the Kingdom.  
Specimens and illustrations furnished upon application at the offices of the  
PATENT CONCRETE STONE COMPANY (LIMITED), 2, QUEEN STREET  
PLACE, SOUTH-WARK BRIDGE, E.C.

HYDRAULIC LIME AND ROMAN CEMENT.  
MANUFACTURED BY LLOYD JONES AND CO., HALKIN WORKS,  
HOLWELL, FLINTSHIRE. The Halkin Hydraulic Lime is the same as used in  
the construction of the Liverpool Docks, Manchester, and various Waterworks, Col-  
lieries, and Mines throughout the country, being so long celebrated for its strong ce-  
mentitious and connecting powers for masonry in water. Can be supplied by rail or  
water to any part of the Kingdom, either in lump (loose) or ground, and in barrels or  
bags. The Limestone can be had in full cargoes, also their cement in barrels, which is  
of a very superior quality, and warranted pure. Orders to be accompanied by a banker's  
reference.—Apply at the Works, or to E. and W. ASHON, agents, 66, South John Street,  
Liverpool.

## Swan Rope Works.

GARNOCK, BIBBY, AND CO.,  
CHAPEL STREET, LIVERPOOL,  
MANUFACTURERS OF FLAT AND ROUND HEMP AND IRON AND STEEL WIRE  
ROPE FOR MINING, RAILWAY, AND SHIPPING PURPOSES.  
MANILLA ROPE OF SUPERIOR QUALITY, FIFTY PER CENT. STRONGER,  
AND THIRTY PER CENT. CHEAPER than Russian hemp rope.  
WIRE ROPE OF FIRST QUALITY WIRE, and the HIGHEST STANDARD of  
STRENGTH.

First Class Silver Medal, Royal Polytechnic Society,  
Falmouth, 1864.

CREASE'S PNEUMATIC TUNNELLING ENGINE.  
FOR SUPERSEDING THE SLOW AND EXPENSIVE USE OF MANUAL LABOUR  
IN SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to  
drive through any rock of average hardness at a minimum rate of 1 ft. per diem, and  
at the rate of 2 ft. in three days.  
Mr. Crease will undertake contracts for sinking shafts, driving levels, &c., at an en-  
ormous reduction of time and great saving in cost.  
Applications to be addressed (for the present) to the patentee, Mr. E. S. CREASE,  
Tavistock, Devon.

BASTIER'S PATENT CHAIN PUMP.  
APPARATUS FOR RAISING WATER ECONOMICALLY, ESPECIALLY  
APPLICABLE TO ALL KINDS OF MINES, DRAINAGE, WELLS, MARINE,  
FISH, &c.

J. U. BASTIER begs to call the attention of proprietors of mines, engineers, architects  
and the public in general to his new pump, the cheapest and most efficient ever  
introduced to public notice. The principle of this new pump is simple and effective, and  
its action is so arranged that accidental breakage is impossible. It occupies less space  
than any other kind of pump in use, does not interfere with the working of the shafts  
and mines, and is raised economically from wells of any depth; it can be  
worked either by steam-engine or any other motive power, by quick or slow motion.  
The following statement presents some of the results obtained by this hydraulic machine  
as daily demonstrated by use:—  
1.—It utilizes from 90 to 92 per cent. of the motive power.  
2.—It is free from expense of installation is 75 per cent. less than the usual pumps em-  
ployed for mining purposes.  
3.—It occupies a very small space.  
4.—It raises water from any depth with the same facility and economy.  
5.—It raises with the water, and without the slightest injury to the apparatus, sand,  
mud, wood, stone, and every object of a smaller diameter than its tube.  
6.—It is easily removed, and requires no cleaning or attention.  
BASTIER'S PATENT CHAIN-PUMP may be seen daily in operation at Messrs.  
BARNES BROS. and Co.'s Patent Rice Starch Works, Bromley-by-Bow, London, E.C.  
Orders of admission to be had on application to the inventor and patentee, Mr. J. U.  
BASTIER, C.E., 12, Gower Street North, London.

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AT HIS OWN EXPENSE, and will GUARANTEE IT FOR ONE YEAR, or will  
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OF HIS INVENTION.

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A Series of Seven Articles published in the MINING JOURNAL, under the  
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London: Published at the MINING JOURNAL office, 26, Fleet-street, E.C., and sold  
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AND HARDWARE SONS' IRON TRADE CIRCULAR  
The "Iron Trade Circular" is an excellent business journal of the mining districts  
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United Kingdom, but generally of the entire mining and manufacturing districts of  
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district of South Durham and Cleveland, with which it has been closely identified since  
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Published every Saturday, price 2d., or quarterly 2s. 2d.  
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the BEST AND NEWEST PRINCIPLES. We beg most especially to call the attention  
of the public to the manufacture of our BOILERS, which have been tested by most of  
our leading engineers. PUMP WORK CASTINGS OF EVERY DESCRIPTION, both  
of brass and iron. HAMMERED IRON AND HEAVY SHAFTS OF ANY SIZE.  
CHAINS made of the best iron, and warranted. RAILWAY WORK OF EVERY  
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ALL ORDERS FOR ABROAD RECEIVE THEIR BEST ATTENTION. NICHOLLS,  
WILLIAMS, AND CO. have had 30 years' experience in supplying machinery to foreign  
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MANUFACTURED BY  
ELLIS LEVER,  
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(LATE GILL AND CO.)  
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CHAINS, SHOVELS, EDGE TOOLS, AND EVERY DESCRIPTION OF CAST  
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Machinery sent to all parts of the world.  
Foreign mining companies supplied on liberal terms.

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ESTABLISHED 1847.  
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Passenger carriages and wagons built, either for cash or for payment over a  
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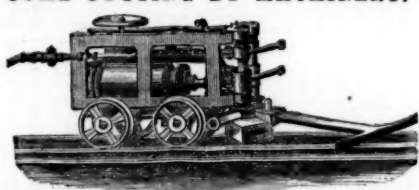
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STEAM ENGINES, all sizes up to 24 in. cylinder, PUMPING AND WINDING  
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SALE OR HIRE.  
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COAL CUTTING MACHINERY.—  
The WEST ARDSLEY COMPANY having, by recently patented improvements,  
perfected their coal cutting machinery, worked by compressed air, are NOW READY  
TO MAKE CONTRACTS FOR THE CONSTRUCTION AND USE OF THEIR MACHINES.  
The results of twelve months' experience in the working of these machines, by the  
West Ardsley Company, have proved most satisfactory, their use being found to  
CHEAPEN THE COST AND IMPROVE THE AVERAGE SIZE OF THE COAL, TO LIGHTEN  
THE LABOUR, and also TO MODIFY THE SANITARY CONDITION OF THE MINE.  
All communications to be made to Messrs. FIRTH, DONISTHORPE, and BOWER, No. 8,  
Britannia-street, Leeds.

NOTICE.—The WEST ARDSLEY COMPANY, having reason  
to believe that their patents are being infringed upon, hereby give notice that  
they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may  
MAKE FOR SALE, OR USE ANY MACHINERY in the construction of which any  
such INFRINGEMENT is MADE.

## COAL CUTTING BY MACHINERY.



MESSRS. RIDLEY AND CO. have, by recently PATENTED  
IMPROVEMENTS, COMPLETED THEIR TRUNK COAL CUTTING MA-  
CHINE, WORKED BY COMPRESSED AIR, and are NOW PREPARED TO NE-  
GOTIATE FOR THE USE, AND TO SUPPLY MACHINES, which will be found to  
COMBINE SIMPLICITY OF CONSTRUCTION WITH PORTABILITY AND ECONOMY  
IN WORKING. By the use of these machines a CONSIDERABLE SAVING OF COAL  
IS EFFECTED, and the COST OF LABOUR MUCH REDUCED. Each machine will  
be guaranteed as to its capabilities, &c.  
All applications to be made to Messrs. RIDLEY AND CO., No. 11, South-street, Finsbury  
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HENRY HUGHES AND CO.,  
FALCON RAILWAY PLANT WORKS,  
LOUGHBOROUGH,  
ENGINEERS, IRONFOUNDERS, BOILER MAKERS, AND MANUFACTURERS  
OF EVERY DESCRIPTION OF RAILWAY MACHINERY.



LOCOMOTIVE ENGINES, for MINERAL AND CONTRACTORS' RAILWAYS, of the  
best materials and workmanship, always in progress. These engines are designed  
to supply the chief requisites in tank locomotives—viz., reduction of the overhanging  
weight at the fire-box end, proper distribution of the weight upon the wheels, and keep-  
ing the centre of gravity low. These are accomplished by making the fire-box and its  
shell on an improved principle, which enables the driving axle to be placed further back  
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description.

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## International Exhibition, 1862—Prize Medal.



JAMES RUSSELL AND SONS  
(the original patentees and first makers of wrought-iron  
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PRIZE MEDAL for the "good work" displayed in their  
wrought-iron tubes and fittings.  
Warehouse, 81, Upper Ground-street, London, S.

BICKFORD'S PATENT SAFETY-FUSE OBTAINED THE  
PRIZE MEDALS at the ROYAL EXHIBITION of 1851, at the INTERNA-  
TIONAL EXHIBITION of 1855, in London, and at the IMPERIAL EXPOSITION  
held in Paris, in 1855.



BICKFORD, SMITH, AND CO.,  
TUCKINGMILL, CORNWALL, MANUFACTURERS  
OF PATENT SAFETY-FUSE, having been informed that the  
same of their firm has been attached to fuse not of their ma-  
nufacture, beg to call the attention of the trade and public to  
the following announcement:—  
EVERY COIL OF FUSE MANUFACTURED BY THEM HAS  
TWO SEPARATE THREADS PASSING THROUGH THE COLUMN OF GUNPOW-  
DER, AND BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE  
THREADS AS THEIR TRADE MARK.

## Prize Medals—International Exhibition, Class 1 and 2.

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THE CRUCIBLES manufactured by the PATENT PLUMBAGO CRUCIBLE  
COMPANY are the ONLY KIND for which a MEDAL has  
been AWARDED, and are now used exclusively by the English,  
Australian, and Indian Mints; the French, Russian, and other  
Continental Mints; the Royal Arsenal at Woolwich, Brest,  
and Toulon, &c.; and have been adopted by most of the large  
ENGINEERS, BRASSFOUNDERS, and REFINERS in this  
country and abroad. THE GREAT SUPERIORITY of these  
melting pots consists in their capability of melting on an average  
40 pourings of the most difficult metals, and a still greater num-  
ber of those of an ordinary character, some of them having ac-  
tually reached the EXTRAORDINARY NUMBER of 96 melt-  
ings. They are unaffected by change of temperature, never  
crack, and become heated much more rapidly than any other  
crucibles. In consequence of their great durability, the saving  
of waste is also very considerable.

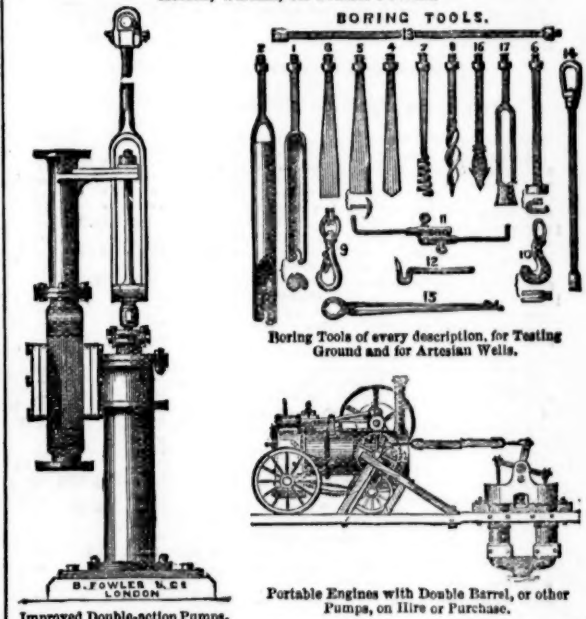
The company have recently introduced CRUCIBLES SPECIALLY ADAPTED  
for the following purposes, viz.:—MALLEABLE IRON MELTING, the average working  
of which has proved to be about seven days; STEEL MELTING, which are found to  
save nearly 1 1/2 ton of fuel to every ton of steel fused; and for ZINC MELTING, lasting  
much longer than the ordinary iron pots, and saving the great loss which arises from  
mixture with iron.

The Patent Plumbago Crucible Company likewise manufacture and import Clay Cru-  
cibles, Muffles, Portable Furnaces, &c. Stone Basks, all descriptions of fire-standing  
goods, and every requisite for the Assayer and Dentist.

For lists, testimonials, &c., apply to the Patent Plumbago Crucible Company, Batter-  
sea Works, London, S.W.

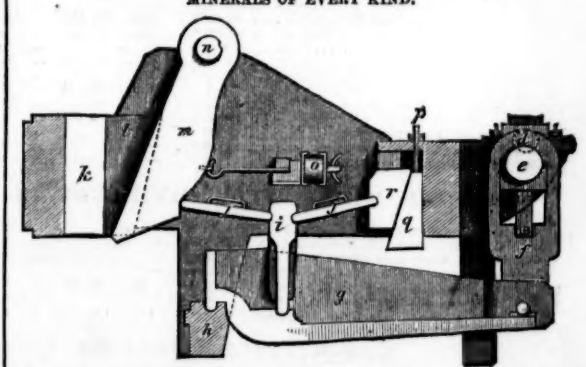
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WHITEHARTS STREET, LITTLE CHURCH, LONDON, E.C.,  
HYDRAULIC AND GENERAL ENGINEERS,  
MANUFACTURERS OF PUMPS OF EVERY DESCRIPTION FOR HAND,  
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Improved Double-action Pumps.  
Full information, Drawings, Price Lists, &c., relating to the above, and to Hydraulic  
Machinery of all descriptions—Crabs, Pulleys, Blocks, and Hoisting Tackle of superior  
manufacture—may be had on application.

BLAKE'S PATENT STONE BREAKER,  
OR ORE CRUSHING MACHINE,  
FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND  
MINERALS OF EVERY KIND.



It is rapidly making its way to all parts of the globe, being now in profitable use in  
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United States and England.

The above section illustrates Blake's Stone Breaker, just as made the last five years  
and is fully protected in every part by patents.

Extract from Specification:—A short but powerful vibration is imparted to one or  
both of the jaws by any convenient arrangement, and combination of powerful levers,  
worked by a crank or eccentric on the main shaft.

LEGAL PROCEEDINGS will be taken at once against any person or persons found  
making, using, or vending any machine, the construction of which will constitute an in-  
fringement on the above patent. Read extracts of testimonials:—

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an article, but now think it money well spent.  
WILLIAM HUNT.

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crushing the hardest stones and quartz.  
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Our 15 by 7 in. machine has broken 4 tons of hard winstone in 20 minutes, for fine  
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WM. G. ROBERTS.

General Fremont's Mines, California.—The 15 by 7 in. machine effects a saving of  
the labour of about 30 men, or \$75 per day. The high estimation in which we hold  
your invention is shown by the fact that Mr. Park has just ordered a third machine for  
this estate.  
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Only maker in the United Kingdom.

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2000	Copper Mines of England	25 0 0	—	—	7 1/2 per cent.	—Half-yearly.
40000	Ditto ditto (stock)	100 0 0	—	—	15 15 0	0 1 0—Mar. 1885
867	Cwm Erddin (lead), Cardiganshire [L.]	7 10 0	—	—	283 10 0	0 4 0—April, 1885
128	Cwm-y-wlad (lead), Cardiganshire [L.]	40 0 0	—	—	622 0 0	0 5 0—June, 1884
280	Dewant Mines (sil.-lead), Durham	300 0 0	—	—	962 0 0	0 3 0—Mar. 1885
1294	Devon Gt. Cons. (cop.), Tavistock [S.E.]	1 0 0	—	—	791 10 0	0 5 0—April, 1885
348	Dolcoath (copper), tin, Camborne	128 17 0	—	—	126 0 0	0 1 0—Nov. 1884
512	East Bassett (cop.), Redruth [S.E.]	20 10 0	—	—	13 2 0	0 10 0—April, 1885
6144	East Carn Brea (copper), tin, Illogan [S.E.]	2 14 0	—	—	105 10 0	0 2 0—April, 1885
800	East Darran (lead), Cardiganshire	32 0 0	—	—	349 10 0	0 4 0—June, 1884
128	East Pool (tin), Cornwall, Pool, Illogan	24 0 0	—	—	0 4 0	0 2 0—Feb. 1885
5000	East Rosewarne (cop.), tin, Gwiltar	2 15 0	—	—	67 0 0	0 1 0—May, 1885
2900	Foxdale (lead), Isle of Man [L.]	28 0 0	—	—	2 1 0	0 7 0—Mar. 1885
5000	Frank Mills (lead), Cheshire [L.]	25 0 0	—	—	3 1 0	0 10 0—Mar. 1885
5 000	Great Laxey (lead), Isle of Man [L.]	4 0 0	—	—	6 2 0	0 15 0—Mar. 1885
5000	Great Wh. Vor (tin), Helston [S.E.]	40 0 0	—	—	15 0 0	0 5 0—Aug. 1884
119	Great Work (tin), Gernoe	100 0 0	—	—	31 10 0	0 1 5 0—Feb. 1885
1024	Herodfoot (id.), near Liskeard [S.E.]	8 10 0	—	—	433 10 0	0 3 0—April, 1885
400	Lisburne (lead), Cardiganshire, Wales	18 10 0	—	—	1 0 0	0 1 0—Oct. 1884
2000	Massy-Nash (lead) [L.]	20 0 0	—	—	3 0 0	0 2 0—April, 1885
9000	Marx Valley (copper), Cardigan	4 10 0	—	—	0 6 0	0 2 0—Mar. 1885
3000	Miners Boundary (lead), Wrexham [L.]	1 0 0	—	—	169 18 0	0 7 0—Feb. 1885
1800	Miners Mining Co. [L.]	25 0 0	—	—	19 2 10	0 14 0—Jan. 1885
50000	Mining Co. of Ireland (cop.-lead, coal)	7 0 0	—	—	0 4 0	0 2 0—April, 1884
40000	Mynydd (iron ore) [L.]	2 10 0	—	—	7 0 0	0 1 0—June, 1884
250	Nant-y-lago (lead), Montgomery	20 0 0	—	—	0 11 0	0 1 0—Oct. 1884
6000	New Birch Tor and Viller Cons. (tin)	1 6 0	—	—	0 13 0	0 2 0—Feb. 1885
9236	North Trekerber (copper), tin, Agnes	1 9 0	—	—	142 10 0	0 7 10—April, 1885
300	Parys Mines (copper), Anglesey [L.]	50 0 0	—	—	76 5 0	0 1 0—Feb. 1885
1193	Fordville (tin), Uny Lelant [S.E.]	10 6 0	—	—	475 10 0	0 2 10—Mar. 1884
80	Sliver Lake Mining Company	280 0 0	—	—	0 5 0	0 5 0—Mar. 1884
812	South Carn Brea (cop.), tin, Illogan [S.E.]	2 10 0	—	—	490 10 0	0 10 0—May, 1884
4000	St. Day United (tin), Redruth	14 0 0	—	—	16 11 0	0 10 0—Mar. 1885
940	St. Ives Consols (tin), St. Ives	8 0 0	—	—	36 9 0	0 6 0—Mar. 1885
2000	Tinroff (cop.), tin, Pool, Illogan [S.E.]	9 0 0	—	—	5 10 0	0 1 0—May, 1885
9000	West Bassett (copper), Illogan [S.E.]	1 10 0	—	—	63 10 0	0 1 0—Nov. 1884
3000	W. Chiverton (id.), Penryn [S.E.]	—	—	—	429 0 0	0 4 0—April, 1885
256	West Damsel (copper), Gwennap	85 10 0	—	—	296 10 0	0 1 0—Mar. 1885
400	W. Wh. Seton (cop.), Camborne [S.E.]	47 10 0	—	—	15 0 0	0 10 0—Aug. 1884
812	Wheel Bassett (copper), Illogan [S.E.]	2 10 0	—	—	288 5 0	0 4 0—Mar. 1884
1294	Wheel Jane (silver-lead), Kew	30 0 0	—	—	343 0 0	0 5 0—May, 1884
4295	Wheel Kitty (tin), St. Agnes	5 4 0	—	—	196 15 0	0 5 0—April, 1885
1024	Wh. Mary Ann (id.), Menheniot [S.E.]	8 0 0	—	—	81 10 0	0 12 0—Mar. 1885
100	Wheel Mary (tin), Lelant	86 2 0	—	—	15 3 0	0 6 0—May, 1885
80	Wheel Ovelin (tin), St. Just, Cornwall	70 0 0	—	—	—	—
996	Wheel Seton (tin), Cornwall	85 10 0	—	—	—	—
1040	Wh. Trevelyan (sil.-id.), Liskeard [S.E.]	5 17 0	—	—	—	—
7000	Wicklow (copper) [L.]	2 10 0	—	—	—	—

\* Dividends paid every two months. † Dividends paid every three months.

## BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

340	Boscan (tin), St. Just	30 10 0	—	—	30 10 0	1 0 0—Mar. 1882
286	Concorro (cop., tin), Carnarvon	76 10 0	—	—	85 0 0	0 0 0—June, 1882
2450	Cook's Kitchen (copper), Illogan	18 9 0	—	—	1 7 0	0 7 0—Mar. 1882
1024	Cop Hill (copper), Redruth	12 0 0	—	—	2 7 0	—Sept. 1882
1055	Craddock Moor (copper), St. Cleer	8 0 0	—	—	7 12 0	0 4 0—July, 1882
4076	Devon and Cornwall (cop.), Tavistock	6 3 0	—	—	0 10 0	0 2 0—Feb. 1885
12900	Drake Walls (tin), Cornwall, Calstock	2 1 0	—	—	0 16 0	0 1 6—May, 1883
3000	Dryngwm (lead), Wales	12 6 0	—	—	0 17 0	0 2 0—Jan. 1884
1906	East Wheel Lovell (tin), Wendron	3 9 0	—	—	0 10 0	0 16 0—May, 1884
940	Fowey Consols (copper), Tavy	4 7 0	—	—	41 3 0	0 2 0—June, 1882
6000	Great South Tolgus (copper), Redruth	0 14 0	—	—	7 18 0	0 6 0—Dec. 1883
10240	Glenalea (Clitters' Adit) (copper)	0 2 0	—	—	0 3 0	0 1 6—Mar. 1882
160	Lavant (copper), tin, St. Just	2 10 0	—	—	1091 0 0	0 5 0—May, 1880
640	Mount Pleasant (lead), Mold	4 0 0	—	—	18 1 0	0 7 0—Aug. 1882
5000	Orehead (lead), Flintshire	0 8 0	—	—	0 10 0	0 4 0—Mar. 1882
6400	Par Consols (cop.), St. Blazey [S.E.]	1 2 0	—	—	86 19 0	0 2 0—Mar. 1882
1772	Poiborro (tin), St. Agnes	15 0 0	—	—	7 19 0	0 10 0—Nov. 1883
512	Poiborro (tin), St. Agnes	8 0 0	—	—	1 0 0	0 1 0—July, 1883
6000	Rosewell (tin), Cornwall, Uny Lelant	3 0 0	—	—	0 10 0	0 1 0—June, 1883
512	South Tolgus (cop.), Redruth	8 0 0	—	—	74 10 0	0 1 0—May, 1883
496	St. Wh. Frances (cop.), Illogan [S.E.]	18 18 0	—	—	370 18 0	0 1 0—Nov. 1883
572	Spearhead Moor (tin), Cornwall, St. Just	92 17 0	—	—	9 15 0	0 1 0—June, 1882
372	Trevelyan Consols (tin), St. Ives	14 10 0	—	—	7 0 0	0 10 0—Sept. 1880
1000	Trumpet Consols (tin), near Helston	11 10 0	—	—	11 0 0	0 2 0—Mar. 1882
4000	Vigna and Clogau (copper) [L.]	5 0 0	—	—	6 2 0	0 10 0—Mar. 1884
60	West Barton Gill (lead), Yorkshire	60 0 0	—	—	14 10 0	0 3 0—June, 1881
1024	West Carn Brea (cop.), Liskeard [S.E.]	10 0 0	—	—	101 1 3	0 10 0—Oct. 1882
1600	Wheel Bassett (copper), Illogan [S.E.]	2 10 0	—	—	10 2 0	0 7 0—July, 1882
1024	Wheel Kitty (tin), Uny Lelant [S.E.]	3 6 0	—	—	76 5 0	0 1 0—May, 1882
956	Wheel Margaret (tin), Uny Lelant	13 17 0	—	—	6 1 3	0 3 0—Nov. 1883
3044	Wheel Tremayne (tin), Gwiltar	6 11 3	—	—	0 19 0	0 3 0—May, 1882
6100	West Fowey Consols (tin and copper)	7 10 0	—	—	—	—
8000	Wharfedale Mining Company [L.]	0 5 0	—	—	—	—

## FOREIGN DIVIDEND MINES.

2484	Burra Burra (cop.), South Australia	8 0 0	—	—	320 0 0	0 5 0—Sept. 1884
15000	Cape Copper Mining [L.] [S.E.]	7 0 0	—	—	1 5 0	0 10 0—April, 1885
12000	Cobra Copper Co. (cop.), Cuba [S.E.]	40 0 0	—	—	101 0 0	0 1 0—Jan. 1885
70000	Englefield and Anglo (cop.), Cuba [S.E.]	40 0 0	—	—	12 0 0	0 2 0—Aug. 1884
18000	East Indian Coal, Calcutta	10 0 0	—	—	7 1/2 per cent.	—
25000	Fortuna (lead), Spain [L.]	3 0 0	—	—	0 14 0	0 3 0—Dec. 1884
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0	—	—	21 10 0	0 1 0—June, 1884
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0	—	—	0 19 0	0 1 0—June, 1884
16000	Llanos (lead), Spain [L.]	3 0 0	—	—	11 6 0	0 4 0—Jan. 1885
10000	Lusitanian (Portugal) [S.E.]	2 0 0	—	—	1 4 0	0 3 0—Jan. 1885
9278	New Widberg (copper)	2 0 0	—	—	0 10 0	0 10 0—Aug. 1884
50000	Panfilotti (copper) [L.] [S.E.]	4 0 0	—	—	7 1/2 per cent.	—Yearly.
10000	Pontgibaud (sil.-lead), France [S.E.]	320 0 0	—	—	2 0 0	0 16 0—Dec. 1884
97500	Port Phillip (gold), Clunes [S.E.]	1 0 0	—	—	0 12 0	0 1 0—July, 1884
11000	St. John del Rey [L.] [Brazil]	15 0 0	—	—	63 15 0	0 2 10—June, 1884
41754	United Mexican (sil.), Mexico [S.E.]	28 0 0	—	—	2 19 0	0 5 0—Sept. 1884
10000	Vancouver (coal) [L.]	5 0 0	—	—	0 15 0	0 5 0—Nov. 1884
50000	Victoria (London) Mining Co. [L.]	1 0 0	—	—	0 7 0	0 3 0—Jan. 1885
40000	West Canada Mining Company [L.]	1 0 0	—	—	0 17 0	0 5 0—Dec. 1884

## FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Alten and Quannang Unl. (cop.) [L.] [S.E.]	4 10 0	—	—	4 5 0	0 15 0—Nov. 1883
20000	Australian (cop.), S. Australia [L.]	7 7 0	—	—	0 10 0	0 10 0—Dec. 1883
8000	Central American (silver) [L.]	8 0 0	—	—	4 6 0	0 10 0—Dec. 1883
10000	Copiam Mining Company, Chili [S.E.]	16 0 0	—	—	6 18 0	0 10 0—Nov. 1882
100000	Don Pedro No. Del Rey [L.] [S.E.]	0 13 0	—	—	0 9 0	0 0 0—Dec. 1883
103818	Marquitta and New Granada [S.E.]	1 0 0	—	—	0 9 0	0 1 0—July, 1880
45000	Yudamantana (cop.), S. A. [L.] [S.E.]	1 3 0	—	—	0 5 0	0 5 0—Aug. 1883

## NON-DIVIDEND FOREIGN MINES.

35000	Alamillos (lead), Spain [L.] [S.E.]	1 10 0	—	—	1 1/2	—1 1/2—Apr. 1885
100000	Anglo-Brazilian (gold) [L.] [S.E.]	0 6 0	—	—	0 6 0	—Dec. 1883
20000	Bearin Tin Streaming Company [L.]	0 17 0	—	—	—	—Oct. 1883
20000	Capula (silver), Mexico [L.] [S.E.]	1 5 0	—	—	1 1/2	—1 1/2—Feb. 1884
10000	Copiam Smelting [L.] [Chili]	10 0 0	—	—	—	—Fully paid.
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	—	—	—	—Fully paid.
50000	Est. del Rey (gold), Brazil [L.] [S.E.]	2 0 0	—	—	1 1/2	—1 1/2—April, 1885
15000	El Chico Silver Mining and Reduction Company [L.]	5 0 0	—	—	—	—Fully paid.
8000	English and Canadian Mining Company [L.]	5 0 0	—	—	—	—Fully paid.
40000	Fortuna (copper), West Australia [L.]	2 0 0	—	—	—	—Fully paid.
40000	Frontino and Bolivia (gold), New Granada [L.] [S.E.]	1 0 0	—	—	—	—Mar. 1885
10000	Gonessa (lead) [L.] [S.E.]	5000 £ paid, 5000 £ paid	—	—	—	—May, 1885
80000	Great Northern (copper), South Australia [L.] [S.E.]	1 10 0	—	—	—	—June, 1882
10000	Great Barrier Land, Mining, Ac., New Zealand [L.]	8 0 0	—	—	—	—Fully paid.
24000	Hindustan (copper), Bengal [L.] [S.E.]	5 0 0	—	—	—	—Feb. 1885
4000	Hope Silver Lead and Copper Mining Co. [L.] [Jamaica]	25 0 0	—	—	—	—Fully paid.
130000	Lagunazo (sulphur, copper), Portugal [L.]	1 0 0	—	—	—	—Fully paid.
100000	Montes Aneiros (gold), Brazil [L.] [S.E.]	2 0 0	—	—	3/4	—3/4—Fully paid.
60000	Nova Scotia (land and gold) [L.] [S.E.]	1 0 0	—	—	—	—Nov. 1885
10000	Otea (copper) New Zealand [L.] [S.E.]	1 0 0	—	—	—	—Mar. 1885
15000	Pachuca Silver Mining Company, Mexico [L.]	1 0 0	—	—	—	—June, 1883
4000	Pel River Land and Mineral [Limited]	100 0 0	—	—	—	—Stock.
23000	Quebrada (copper), Venezuela [L.] [S.E.]	6 10 0	—	—	—	—Sept. 1884
10175	Rhenish Consolidated (lead) [S.E.]	5000 £ paid, 4178 30s. paid	—	—	—	—Mar. 1885
50000	Rosa Grande (gold), Brazil [L.] [S.E.]	0 5 0	—	—	—	—Fully paid.
10000	San Roque (lead), Spain	0 5 0	—	—	—	—Fully paid.
60000	Santa Barbara (gold), Brazil [L.] [S.E.]	0 15 0	—	—	3/4	—3/4—Sept. 1884
130000	Scottish Australian Mining Company [L.]	0 17 0	—	—	—	—Feb. 1884
15000	South Europe Mining Company, Spain [L.] [S.E.]	8 0 0	—	—	—	—Fully paid.